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PERSONAL.

Mr. W. M. Davis, for the past 13 years Town Engineer of Woodstock, Ont., has been appointed Town Engineer of Berlin, Ont.

Mr. Edward N. Sampson has been appointed Engineer of the Consolidated Sewer, Water and Highway Departments of Andover, Mass.

Mr. R. H. Cushing has been appointed Assistant Engineer of the Intercolonial Ry., in charge of the terminal station at St. John, N. B.

Mr. W. H. Neelands, electrical engineer, of the British Columbia Electric Ry., was married at Vancouver, B. C., Nov. 3, to Miss Ellen Alcock.

Sr. Manuel Torres Toriga, City Engineer, of the City of Mexico, Mex., is visiting Chicago, for the purpose of studying municipal improvements.

Col. Saml. M. Mansfield, Corps of Engineers, U. S. Army, has been appointed by President McKinley a member of the California Debris Commission.

Mr. Ferdinand W. Peck, United States Commissioner-General to the Paris Exposition of 1900, arrived in New York, Nov. 11, on the "St. Louis."

Mr. Nathaniel Roberts, M. Am. Soc. C. E., consulting engineer, 120 Liberty St., New York, has removed his office to 63 Ocean Ave., Jersey City, N. J.

Mr. H. S. Ayres has been appointed Secretary of the Michigan Brass & Iron Works, Detroit, Mich. He has been connected with this company for a number of years.

Mr. Edwin F. Wendt has been appointed Assistant Engineer of the Pittsburg & Lake Erie R. R., in charge of Maintenance of Way and Construction, with headquarters in Pittsburg, Pa.

Mr. Nicholas Turnbull, A. M. Inst. C. E., of the firm of Richard Johnson & Nephew, Manchester, England, is making a visit to the United States to inspect American manufacturing plants.

Mr. Edmund Alsop, civil engineer, of Philadelphia, Pa., has returned to that city from Porto Rico, where he has been for the purpose of securing a general idea of the business prospects in that island.

Mr. John Medway, formerly Superintendent of Motive Power on the Fitchburg R. R., has been appointed Master Car Builder for Swift & Co., Chicago, with headquarters at the Union Stock Yards in that city.

Mr. A. G. Menocal, M. Am. Soc. C. E., Civil Engineer, retired, U. S. Navy, has been sent to Cuba by the Navy Department to make a study of the arsenals, wharves and other accessories of the navy there.

Capt. Francis R. Shunk, Corps of Engineers, U. S. Army, has been relieved from duty at the United States Military Academy, West Point, N. Y., and has been ordered to duty at Manila, Philippine Islands.

Capt. Henry Jervey, Corps of Engineers, U. S. Army, has been ordered to New Orleans, La., for duty in charge of the Fourth District, Mississippi River Improvements, relieving Maj. Jos. H. Willard, Corps of Engineers.

Mr. Theodore Buskirk, of the engineering department of the Lake Shore & Michigan Southern Ry., has been appointed Assistant Engineer of the Track Elevation Bureau of Chicago, Ill., to succeed Mr. T. P. McDonough, resigned.

Mr. H. H. Vaughan, Mechanical Engineer of the Philadelphia & Reading R. R., and previously Mechanical Engineer of the Great Northern Ry., has accepted the position of Mechanical Engineer of the Q. & C. Co., with headquarters at its Chicago office, Western Union Building.

Mr. Friedrich Tischendorfer, Chief Engineer of the Electricitats Aktiengesellschaft, formerly Schuckert & Co., electrical manufacturers, of Nuremberg, Germany, is at the Belvedere House, New York. He is visiting this country for the purpose of purchasing electrical material and machinery.

Lieut. Clarke S. Smith, Corps of Engineers, U. S. Army, has been relieved from duty at the U. S. Engineer School, Willet's Point, N. Y., and has been ordered to New Orleans, La., for duty under Major Jas. B. Quinn, Corps of Engineers. Lieut. Amos A. Fries, Corps of Engineers, U. S. A., has also been relieved from duty at the U. S. Engineer School, and has been ordered to Portland, Ore., for duty under Maj. Walter L. Fisk, M. Am. Soc. C. E., Corps of Engineers.

Mr. W. H. Pratt has been appointed Manager of the works of the Universal Construction Co., Chicago. He was formerly Receiver and Manager of the Mount Vernon Bridge Co., Mount Vernon, O., and before that was connected with the Edge Moor Bridge Works, Edge Moor, Del.

Mr. Walter J. Sherman has been appointed Engineer of the Centennial Commission, Toledo, O., and will have charge of preparing the topographical map and plans of the reclaimed land along the water front of Bayview Park, in that city, which will be the site of the coming State Centennial.

Lieut. Frederick A. Altstaetter, Corps of Engineers, U. S. Army, has been ordered to duty at the U. S. Engineer School, Willet's Point, N. Y. Lieut. Harley B. Ferguson, Corps of Engineers, stationed at present at the U. S. Military Academy, West Point, N. Y., has also been ordered to duty at the U. S. Engineer School.

Mr. Henry Vier, for the past nine years in charge of the grade crossings work of the New York Central & Hudson River R. R., with headquarters at Buffalo, N. Y., has been appointed Chief Engineer of the Map and Survey Department, with headquarters at Syracuse, N. Y. Mr. H. C. Merriman has been appointed to succeed him.

Mr. W. E. Green, Division Superintendent of the Shreveport and Texarkana Division of the Kansas City, Pittsburg & Gulf R. R., with headquarters at Texarkana, Tex., has been promoted to be General Superintendent, succeeding Mr. F. Mertsheimer, with headquarters at Kansas City, Mo., and his former office has been abolished.

Mr. C. M. Setterwall, iron manufacturer, of Sweden, is visiting Pittsburg, Pa., for the purpose of studying American methods and comparing the relative costs of the production of iron and steel in the two countries. He is accompanied by Mr. N. Lilienborg, his New York agent, and their headquarters are at present at the Monongahela Hotel, Pittsburg.

Prof. William S. Aldrich, M. Am. Soc. M. E., of the College of Engineering and Mechanic Arts of the University of West Virginia, Morgantown, W. Va., has returned to his collegiate duties after five months of service in the Naval Engineer Corps as a Passed Assistant Engineer, with the rank of Lieutenant, on board the U. S. Repair Ship "Vulcan."

Lieut. Jas. P. Jervey, Corps of Engineers, U. S. Army, has been ordered to report at the U. S. Military Academy, West Point, N. Y., not later than Jan. 4, next, for duty in the Department of Civil and Military Engineering. Lieut. Harry Burgess, Corps of Engineers, at present stationed at Galveston, Tex., has also been ordered to the U. S. Military Academy for duty.

Mr. John Cassan Wait, M. Am. Soc. C. E., consulting engineer and attorney and counselor at law, has removed his offices from the American Surety Building, No. 100 Broadway, to the St. Paul Building, 220 Broadway, New York. Mr. Wait was formerly Assistant Professor of Engineering in Harvard University, Cambridge, Mass., and is the author of "Engineering and Architectural Jurisprudence."

Capt. E. E. Winslow, Corps of Engineers, U. S. Army, has been relieved from duty at the United States Military Academy, West Point, N. Y., and has been ordered to relieve Capt. Mason M. Patrick, Corps of Engineers, of the charge of the First and Second Districts, Mississippi River Improvements, with headquarters at Memphis, Tenn. Capt. Patrick upon being relieved by Capt. Winslow will assume the duties of Secretary and Disbursing Officer of the Mississippi River Commission, with office at St. Louis, Mo.

Mr. Claude W. Kinder, M. I. C.E., M. Am. Soc. C.E., and Chief Engineer of the Imperial Chinese Railway Administration, has the following personal record, according to "The Indian and Eastern Engineer": Mr. Kinder is the son of Major T. W. Kinder, formerly Master of the Mint in Hong Kong and later of the Japanese mint. One brother, Col. D. T. Kinder, was formerly in command in Burmah, and another brother is Commander Kinder, R. N. Mr. Claude W. Kinder began his professional career in the office of Brown & Marshall, of Birmingham, after studying in France. He later became an Assistant Engineer under Herr Basson, of the Engineering & Mining Co., of Alexandrofsky, on the Neva. In 1872 he was Assistant Engineer on the Japanese State Railways, and remained in that employ until the Satsuma rebellion. He then went to China and was Resident Engineer of the Tong colliery, and later became Engineer in Chief of the Chinese Engineering & Mining Co., and held that position until 1888, when he received his present appointment. While in the employ of the coal company he built, against great opposition, the first standard railway in China—the 7 miles between Tongshaw and the coal canal. He also improvised the first locomotive used on this line, out of a stationary engine and a platform car. In 1889 Mr. Kinder visited the United States and thoroughly inspected our railway system, and he believes generally in American railway methods.

OBITUARY.

Mr. C. H. Sutherland, mechanical engineer of the Grand Trunk Ry., died recently.

Mr. Elias Giesering, sewer contractor, of Marquette, Mich., was killed by a cave-in of a sewer trench, Nov. 3.

Mr. William H. Hand, contractor and builder, of New York city, died at his home, Nyack, N. Y., Nov. 15, aged 61.

Mr. E. A. Elder, General Superintendent of the Florida East Coast Ry., died in Toledo, O., Nov. 12, of malarial fever. His home was in St. Augustine, Fla.

Mr. Leighton Lee, Superintendent of the firm of Lee & Co., engineers and contracters, of Philadelphia, Pa., who was badly injured Oct. 14 by falling from the South Side Elevated R. R. structure, in Chicago, as noted in our issue of Oct. 20, died at the Mercy Hospital, in the latter city, Nov. 15.

Mr. Edwin A. Kimball, formerly Superintendent of the Mechanical Departments of the University of Illinois and of the Illinois Industrial Home for the Blind, Chicago, and an inventor and mechanical engineer, died in that city of pleuro-pneumonia, Nov. 15, aged 64. He was born in Orange, N. H.

The Hon. Joseph M. Rickey, of Steubenville, O., for many years County Surveyor, died in Cleveland, O., Nov. 9, aged 83. He was President of the commission which established the state line between West Virginia and Pennsylvania, and had contributed a number of articles on civil engineering to technical magazines.

Lieut. Keating (son of Mr. Edward H. Keating, M. Am. Soc. C. E., General Manager of the Toronto Ry. Co., Toronto, Ont., and formerly City Engineer of Toronto), died Oct. 26, in South Africa. Lieut. Keating graduated from the Royal Military College, Kingston, Ont., in 1888, and was assigned to the 100th Regiment, then stationed at Halifax, N. S., but which about three months ago was ordered to Africa.

Mr. J. C. Chapman, machinist and the inventor of the Chapman valve and other devices, died at his home in Boston, Mass., Nov. 4, aged 76. He was born at Newmarket, N. H., and learned the machinist's trade in Boston. He was subsequently Master Mechanic of the Charlestown Navy Yard. He resigned this position to become Superintendent of the factory of the Walworth Mfg. Co., Cambridgeport, Mass., which latter position he held until a few years ago, when he retired from active work.

Mr. John E. Dustin, Water Commissioner, of Methuen, Mass., died Nov. 2, aged 62. He was born in Derry, N. H., and learned the machinist's trade in Lawrence, Mass., under the late Aretas Blood. He was employed in locomotive works in Boston for two years, and then engaged in the manufacture of woolen machinery in Lawrence. He was master mechanic for the Brown Lumber Co., Whitefield, N. H., from 1871 until 1876, when he established a machine shop in Lawrence, which he conducted until the time of his death.

Mr. De Witt C. Cregier, formerly City Engineer of Chicago, died there, Nov. 9, aged 69. He was born in New York city and was apprenticed in an engineering establishment, where he began the study of mechanical engineering. For several years, until 1853, he was employed on steamers running between New York, Havana and New Orleans, when he went to Chicago to erect the first pumping machinery for the public water supply. He was Chief Engineer of the water-works for 28 years, and in 1861 became a member of the Board of Public Works. In 1878 he was appointed City Engineer, and four years later was made the head of the Department of Public Parks. He left this position to become Superintendent of the West Division Street Ry., and in 1889 was elected Mayor of Chicago. During his administration the territory of the city was increased by over 140 sq. miles, and he was conspicuous in the early work in the Columbian Exposition plans, being largely instrumental in securing the fair for Chicago. He designed the two largest pumping engines at the North Side Water-Works, Chicago, and was identified with the construction of the first two lake tunnels. He was also the inventor of many valuable appliances used on public works, and was a Past President of the Western Society of Engineers.

ENGINEERING SOCIETIES.

COMING TECHNICAL MEETINGS.

NEW YORK ELECTRICAL SOCIETY.
Nov. 17. "Surface Contact Railways," Edward H. Johnson. Secy., George H. Guy, 120 Liberty St., New York city.

ROCHESTER ENGINEERING SOCIETY.
Nov. 18. "Trussing and Car Construction," Fred. R. Hertzog. Secy., John F. Skinner.

CHICAGO ELECTRICAL ASSOCIATION.
Nov. 18. "The Development of the Motor-Cycle," F. B. Rae. Secy., J. R. Cravath, 825 Monadnock Block, Chicago, Ill.

ENGINEERS' CLUB OF COLUMBUS.
Nov. 19. Secy., H. M. Gates, 12½ North High St., Columbus, O.

ENGINEERS' CLUB OF PHILADELPHIA.
Nov. 19. "Engine and Boiler Testing," H. W. Spangler. Secy., L. F. Rondinella, 1122 Girard St., Philadelphia, Pa.

TECHNICAL CLUB OF OMAHA.
Nov. 21. Secy., J. Harry Lawrie, Omaha, Neb.

ENGINEERS' CLUB OF MINNEAPOLIS.
Nov. 21. Secy., H. E. Smith, 1620 S. E. 14th St., Minneapolis, Minn.

ENGINEERS' AND ARCHITECTS' CLUB OF LOUISVILLE.
Nov. 21. Secy., Marshall Morris, 16 Norton Bldg., Louisville, Ky.

CIVIL ENGINEERS' CLUB OF CLEVELAND.
Nov. 22. Secy., Wm. H. Searles, Case Library Bldg., Cleveland.

FRANKLIN INSTITUTE.
Nov. 22. "Lightning and Lightning Arresters," A. J. Wurts; Nov. 23. Discussion, "The Micro-Structure of Bronzes,, and "Specifications on Structural Steel and Rails." Secy., Wm. H. Wahl, 15 South Seventh St., Philadelphia, Pa.

TENNESSEE RIVER IMPROVEMENT ASSOCIATION.
Nov. 28. Chattanooga, Tenn.
ENGINEERING ASSOCIATION OF THE SOUTH.
Nov. 24. Secy., C. B. Wilson, 1000 Broad St., Nashville, Tenn.
CANADIAN SOCIETY OF CIVIL ENGINEERS.
Nov. 24. Secy., C. A. McNab, 112 Mansfield St, Montreal, Canada.
AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS
Nov. 30. Secy., Ralph W. Pope, 26 Cortlandt St., New York city.
BROOKLYN ENGINEERS' CLUB.
Dec. 1. Secy., A. J. Provost, Jr., 191 Montague St., Brooklyn, N. Y.
TECHNICAL SOCIETY OF THE PACIFIC COAST.
Dec. 2. Secy., O. Von Geldern, 819 Market St., San Francisco, Cal.
BROOKLYN INSTITUTE OF ARTS AND SCIENCES.
Dec. 2. Secy., Henry I. Weed, Brooklyn Institute of Arts and Sciences, Brooklyn, N. Y.
ENGINEERS' SOCIETY OF WESTERN NEW YORK.
Dec. 5. Secy., H. J. March, Library Bldg, Buffalo, N. Y.
CIVIL ENGINEERS' SOCIETY OF ST. PAUL.
Dec 5. Secy., C. L. Annan, City Engineer's Office, St. Paul, Minn.
AMERICAN SOCIETY OF MECHANICAL ENGINEERS.
Dec. 6-9. Annual meeting, New York city. Secy., Prof. R. F. Hutton, 12 W. 31st St., New York city.
ENGINEERS' CLUB OF ST. LOUIS.
Dec. 7. Secy., Richard McCulloch, 2401 N. Spring Ave., St. Louis, Mo.
AMERICAN SOCIETY OF CIVIL ENGINEERS.
Dec. 7. Secy., C. W. Hunt, 220 West 57th St., New York city.
WESTERN SOCIETY OF ENGINEERS.
Dec. 7. "Electrolytic Corrosion of Underground Structures," Prof. D. C. Jackson. Secy., N. L. Litten, Monadnock Block, Chicago, Ill.
ST. LOUIS RAILWAY CLUB.
Dec. 9. Secy., H. H. Roberts, 511 Commercial Bldg., St. Louis, Mo.
MONTANA SOCIETY OF ENGINEERS.
Dec. 10. Secy., A. S. Hovey, National Bank Bldg., Helena, Mont.
THE LOUISIANA ENGINEERING SOCIETY.
Dec. 12. Secy., J. F. Coleman, 712 Union St., New Orleans, La.
ENGINEERS' CLUB OF KANSAS CITY.
Dec. 12. Secy., F. W. Tuttle, Baird Bldg., Kansas City, Mo.
DENVER SOCIETY OF CIVIL ENGINEERS.
Dec. 13. Secy., W. B. Lawson, 36 Jacobson Bldg., Denver, Col.
NORTHWEST RAILWAY CLUB.
Dec. 13. Secy, T. A. Foque, Soo Line, Minneapolis, Minn.
NEW ENGLAND RAILWAY CLUB.
Dec. 13. Secy., Edw. L Janes, P O Box 1158, Boston, Mass.
NEW YORK RAILROAD CLUB.
Dec. 15. Secy., W. W. Wheatley, 168 Montague St., Brooklyn, N. Y.
ENGINEERS' CLUB OF CINCINNATI.
Dec. 15. Secy., J. F. Wilson, P. O. Box 333, Cincinnati, O.
SOUTHERN AND SOUTHWESTERN RAILWAY CLUB.
Dec. 15. Secy., F. A. Charpiot, P. O Box 13, Savannah, Ga.
NORTHWESTERN TRACK AND BRIDGE ASSOCIATION
Dec. 16. Secy., D. W. Meeker, St. Paul, Minn.
ENGINEERS' SOCIETY OF WESTERN PENNSYLVANIA
Dec. 20. Secy., R. A. Fessenden. 410 Penn Ave., Pittsburg, Pa.
WESTERN RAILWAY CLUB.
Dec. 20. Secy., F. M. Whyte, 225 Dearborn St., Chicago, Ill.
ENGINEERS' AND ARCHITECTS' ASSOCIATION OF SOUTHERN CALIFORNIA.
Dec. 21. Secy., Frank H. Olmsted, Los Angeles, Cal.
BOSTON SOCIETY OF CIVIL ENGINEERS.
Dec. 21. Secy., S. E. Tinkham, City Hall, Boston, Mass.
WESTERN FOUNDRYMEN'S ASSOCIATION.
Dec. 21. Secy., B. M. Gardner, 1522 Monadnock Block, Chicago, Ill.

NEW YORK RAILROAD CLUB.—At the regular meeting, on Nov. 7, Mr. M. N. Forney delivered "A Short Lecture to Railroad and Supply Men on Conduct and Character."

FLORIDA GOOD ROADS ASSOCIATION.—The annual convention of this association will be held at Jacksonville, Fla., on Nov. 23. The Placide Hotel has been selected as headquarters. J. W. White, Secy.

MASSACHUSETTS STREET RAILWAY ASSOCIATION.—The regular monthly meeting of this association was held on Nov. 9, at Boston, Mass. Mr. E. Moody Boynton addressed the society upon "Rapid Transit."

ENGINEERS' SOCIETY OF WESTERN PENNSYLVANIA.—The regular monthly meeting of this society was held at the Society House, Pittsburg, Pa., on Nov. 15. Dr. R. G. G. Moldenke read a paper on "Cast Iron."

ENGINEERS' CLUB, OF COLUMBUS.—At the meeting on Nov. 5 Mr. F. Herbert Snow, Assoc. M. Am. Soc. C. E., of the firm of Snow & Barber, Boston, Mass., delivered an address on the system of sewer assessments recently established in Boston and Brockton.

WESTERN FOUNRYMEN'S ASSOCIATION.—The regular monthly meeting of this association was held on Nov. 16, at the Great Northern Hotel, Chicago. Major Malcolm McDowell read a paper, entitled "Metalloids in Castings," after which various topics of interest to foundrymen were discussed.

ST. LOUIS RAILWAY CLUB.—At the regular meeting of this club, held on Nov. 11, Mr. Willard Beahan, M. Am. Soc. C. E., presented a paper, entitled "The Proper Organization of the Engineering Department of a Railroad." There was also a discussion of a paper by Prof. R. A. Smart presented at a former meeting.

NATIONAL MUNICIPAL LEAGUE.—Beginning Nov. 30 and continuing through Dec. 2, there will be held at Indianapolis, Ind., a conference of those interested in good city government. The intention of the organization is to make a strong effort to place municipal affairs upon a higher plane. This will be the sixth meeting so far held.

WISCONSIN STATE CHEMISTS' ASSOCIATION.—This is a new society recently organized for the purpose of advancing scientific chemical research. It is the intention to have monthly meetings. The following are the officers for the ensuing year: Pres., Dr. P. Fischer, Milwaukee; Vice-Pres., Herman Schlundt; Secy., I. Ladoff, Milwaukee; Treas., J. H. Fiebing.

THE NEW JERSEY SANITARY ASSOCIATION.—The 24th annual meeting of this association will be held at the Laurel House, Lakewood, N. J., Dec. 9-10. Among the papers to be read are the following:

"The Powers, Duties and Limitations of Boards of Health," Samuel A. Patterson, Asbury Park; "Methods of Sewage Disposal," Rudolph Hering, New York city; "Public Water Supplies and the Prevention of the Pollution of the Same," James H. Fuertes, New York city.

BOSTON SOCIETY OF CIVIL ENGINEERS.—On the evening of Nov. 11 this society celebrated the 50th anniversary of its organization at the Hotel Vendome. Over 100 members were present at the reception and afterwards listened to a lecture by President Howard A. Carson on "Glimpses of Boston Fifty Years Ago." Mr. Desmond FitzGerald gave a historical review of the society, and Secretary Tinkham read a number of congratulatory telegrams from engineering societies here and abroad.

LOUISIANA ENGINEERING SOCIETY.—This society gave its first "outing" on Nov. 5 in the form of a tour of inspection of the points of especial engineering interest in the vicinity of New Orleans. This included trips to the various canals and pumping stations connected with the new drainage system which is being installed in New Orleans. Fully 200 persons, members and friends, participated in the trip. In September last the society became a member of the Association of Engineering Societies.

ENGINEERING ASSOCIATION OF THE SOUTH.—This society held its annual meeting Nov. 10 at the U. S. Engineer's Office, Nashville, Tenn. The Secretary, Mr. C. B. Wilson, submitted his report. Amendments to the constitution intended to broaden the scope of the society were discussed and other general business transacted.

The following officers were elected for the ensuing year: Pres., W. F. Foster; First Vice-Pres., W. M. Lettwitch, Jr.; Second Vice-Pres., E. E. Betts; Secy. and Treas., H. M. Jones; Directors, H. McDonald, J. S. Walker and C. B. Wilson.

RAILWAY SIGNALING CLUB.—The meeting held Nov. 8 at the Great Northern Hotel, Chicago, was an informal one, owing to the small attendance. The resignation of the Secretary, Mr. Seitz, was presented and accepted, and Mr. Tilton was appointed acting secretary for the remainder of the term.

There was a brief discussion on points connected with the use of bracket posts, showing a wide variation of opinion as to the conditions under which such posts should be used.

The next meeting will be held in New York in January. This will be the annual meeting, for the election of officers, etc.

ALABAMA SCIENTIFIC AND INDUSTRIAL SOCIETY.—This society held its semi-annual meeting, Nov. 5, at the Birmingham Commercial Club, Birmingham, Ala.

The committee appointed to consider legislative enactment looking to a more complete record of the output of the various mines and kindred institutions in the State of Alabama, reported favorably on a proposed amendment to the state mining laws, making it compulsory for every operator or lessee of underground mines, ore or coal, lime and bauxite quarries, coke works, clay works, brick works and kindred institutions, to file a monthly report of the output to the state mine inspector, and annually a consolidated report. The recommendation of the committee was adopted, and the society will be represented before the next session of the legislature.

A committee was appointed to make arrangements for the annual meeting, which will be held in January.

ENGINEERS' CLUB OF PHILADELPHIA.—At the meeting on Nov. 5, Mr. Charles Piez presented the paper of the evening upon the subject of "Coal Handling Machinery." He divided machinery for handling coal into two general classes—continuous and non-continuous; the former comprising chain and belt elevators and conveyers as ordinarily manufactured, and the latter including the various types of automatic and tub hoists, overhead bucket tramways and cable railways, each class having its own field of superior usefulness. Mr. Piez confined his remarks to a brief discussion of continuous coal-handling machinery under the two heads of elevators and conveyors, and he described the requirements which must be met in handling different kinds and sizes of coal, and some of the best mechanical devices which are now employed.

Mr. Carl Hering presented an account of recent progress in electric traction. Reference was made to the declining traffic of the various elevated roads resulting from perfected surface systems.

THE CIVIL ENGINEERS' CLUB OF CLEVELAND.—A regular meeting was held Nov. 8th, with 39 members and visitors present. Mr. Oscar Textor, member of the Cleveland Chemical Society, presented a paper, entitled "A Review of Tests of Steel Rivets." The material was basic open hearth steel, with average chemical analysis as follows: Phosphorus, 0.015; manganese, 0.46; sulphur, 0.033; silicon, 0.005; and carbon, 0.11. The rivets were tested for tensile and shearing strength, also by nicking and bending cold, and for their behavior under the hammer, both hot and cold. Tests were also made to discover crystallization under the rivet head, if any. The results were described as being very satisfactory, and the conclusion was reached that with proper manipulation and attention to temperatures, such steel rivets are fully equal to the best wrought-iron rivets and possess superior tensile strength. W. H. Searles, Secy.

THE FOUNDRYMEN'S ASSOCIATION.—The 7th annual meeting of this association was held at the Manufacturers' Club, Philadelphia, Pa.

A report was presented by the executive committee stating the condition of business to be good and improving.

Officers for the ensuing year were elected as follows: Pres., P. D. Wanner, Reading Foundry Company, Ltd., Reading, Pa.; Vice-Pres., A. C. Pessano, George V. Cresson Co., Philadelphia; Secy., Howard Evans, J. W. Paxson Co., Philadelphia; Treas., Josiah Thompson, J. Thompson & Co., Philadelphia. Executive Committee: Walter Wood, Chn., R. D. Wood & Co., Philadelphia; Thos. Glover, Glover Bros., Frankford, Philadelphia; E. E. Brown, E. E. Brown & Co., Philadelphia; Stanley G. Flagg, Jr., Stanley G. Flagg & Co., Philadelphia; Wm. F. Sauter, G. Rehmann & Co., Philadelphia.

The discussion of the topic, "Who is responsible for the cost of patterns in case of a fire in a foundry," was postponed until the next meeting.

A paper, entitled "A Modern Foundry in Europe," was read by Mr. J. A. Penton.

FRANKLIN INSTITUTE.—The schedule of meetings for November and December is as follows:

Nov. 15, "The Agricultural Possibilities of Our New Possessions," Prof. Harvey W. Wiley, Chemist to the U. S. Department of Agriculture; Nov. 16, "The Burton Electric Process of Unhairing and Tanning Skins," George D. Burton, Boston, Mass.; "The Kitson Incandescent Oil Lamp," Arthur Kitson, Philadelphia, Pa.; "A Process for Fireproofing Wood to be Used on the Woodwork of War Vessels," Dr. Chas. J. Hexamer, Philadelphia, Pa.; "The Inflammable and Explosive Properties of Smoke When Confined in a Burning Building, and Its Influence Upon the Spread of Fire," Wm. McDevitt, Philadelphia, Pa.; Nov. 22, "Lightning and Lightning Arresters," A. J. Wurtz, Pittsburg, Pa.; Nov. 23, "The Micro-Structure of Bronzes" and "Specifications for Structural Steel and Rails," discussions; Dec. 6, "Reaction Velocity," Dr. R. H. Bradbury, Philadelphia, Pa.; Dec. 13, "The Kite as an Instrument in Meteorological Research," Prof. Chas. F. Marvin, U. S. Weather Bureau; "Commercial Photometers and Light Standards," Prof. A. J. Roland, Drexel Institute, Philadelphia, Pa.; Dec. 14, "Fresh Studies of Pioneer Tools," Prof. H. C. Mercer, Doylestown, Pa.

A new section to be known as the "Mechanical and Engineering Section" has recently been formed for the consideration of subjects bearing upon the mechanic arts and the engineering problems connected therewith.

At the meeting of the Mining and Metallurgical Section, held on Nov. 9, Mr. Alex. E. Outerbridge, Jr., lectured on "The Mining and Minting of Gold and Silver," giving a brief review of the coinage of the Philadelphia Mint and a description of his work in connection with the study of the spectroscopic method of analysis of gold and silver alloys.

WESTERN SOCIETY OF ENGINEERS.—A special meeting was held Nov. 9, for the reading of the remainder of the papers on track elevation. Mr. W. H. Coverdale described the work on the Pittsburg, Fort Wayne & Chicago Ry. In this case, the bridges were erected on pile bents, set far enough from the ends of the girders to allow of the masonry abutments being built under them. The floor system consists of V-shaped transverse troughs, with broken stone ballast filled in to a depth of 6 ins. above the tops of the troughs. This ballasted floor produces very little noise when trains run over the bridge.

Mr. O'Neill, Superintendent of Track Elevation, representing the city, gave an interesting review of the history of track elevation and the various ordinances that have been passed respecting this work. He also described the work at the 16th St. crossing, recently described in our columns.

Mr. H. W. Parkhurst, of the Illinois Central R. R., described the work on the St. Charles Air Line, which rises to its new grade by an incline on the lake front, and then runs west to the Chicago River, the drawbridge over which had to be raised to correspond to the track elevation. Mr. L. H. Clarke, the engineer in charge of the elevation of the Lake Shore & Michigan Southern Ry. and the Chicago, Rock Island & Pacific Ry., was not present, though he had been expected. The work, however, was described by the engineer in charge of the field work. The floor system of the bridges consists of transverse I-beams, with a deck plate to which the rails are bolted. At Englewood, however, where the yard tracks cross the subways, girders projecting above the floor have been dispensed with, and the floor consists of I-beams crossed by Z-bars, to which the deck plates are riveted.

So much time was occupied by the descriptions of the works and the exhibition of a number of stereopticon views, that it was decided to defer all discussion on the paper until the next regular meeting.

On Nov. 11 a large party of members and invited guests, including several of the University Trustees, went to Champaign, Ill., to visit the University of Illinois, and particularly the engineering schools.

NEW PUBLICATIONS.

BRITISH RAILWAY STATISTICS.—Pub. Doc., London, Eng. Five pamphs.; 8 x 13 ins.; pp. 90, 32, 41, 13 and 18.

Two of these pamphlets contain the regular returns of accidents reported to the British Board of Trade and a third gives the results of a special investigation into shunting or switching accidents which was ordered by the House of Commons on June 28, 1898. These last figures cover the period of ten years ending Dec. 31, 1897. Of the two remaining pamphlets one is a report on hours of labor of railway servants, and the other a report on the capitalization, earnings, cost of operations, etc., of British railways for the year 1897.

MANAGEMENT AND CARE OF A STEAM BOILER. Compiled and published by V. G. Moulson & Co., Cleveland, O. Pamph.; 5¼ x 7½ ins.; pp. 144.

The title page says: "This work gives the opinions and experience of the best known authorities as to the proper management and care of steam boilers." The book is a compilation of articles on boilers, boiler management, fuel, construction, incrustation, corrosion, explosions, etc., together with advertisements of about 50 concerns which deal in articles needed by steam users. The advertisements are alternated with the text throughout the book. The information given in the text is of all grades of merit, good, bad and indifferent. Some of it is rather old, such as the results of Prof. Johnson's tests of fuel, made in 1844, and some of it is erroneous, such as the statements that free-burning coals rapidly lose their heat-giving power on exposure, and that the slack of anthracite is worthless on the grates of a boiler. The book is apparently gotten up to be circulated gratuitously by those who have taken advertising space in it.

TRADE PUBLICATIONS.

(The standard sizes for pamphlets and trade catalogues recommended by all the principal engineering societies of the United States are: 3 1-2 x 6 ins.; 6 x 9 ins., and 9 x 12 ins.)

LAUNDRY MACHINERY.—American Laundry Machinery Co. Cincinnati, O. Pamph.; 11 x 7¾ ins.; pp. 72.

This is a handsomely illustrated catalogue of all the machinery used in a modern steam laundry, including washing, drying, starching and ironing machines, boilers and engines, filters, ventilating fans, etc.

CEMENT MANUFACTURING MACHINERY.—The Jeffrey Mfg. Co., Columbus, O. Pamph.; 7 x 6 ins.; pp. 8; illustrated.

The larger portion of this pamphlet is taken up with a description of the combination separator, bolter and screen for sifting cement. Many claims are made as to the especial efficiency of this machine.

FOUNDRY MACHINERY.—Whiting Foundry Equipment Co. Chicago, Ill. Pamph.; 6 x 9 ins.; pp. 52.

This catalogue illustrates a great variety of machines and appliances used in iron foundries, including cupolas, cranes, ladles, derricks, air hoists, cars, trucks, turntables, brass melting furnaces, flasks, tumbling barrels, molding machines, etc.

TRACTION ENGINES AND AGRICULTURAL MACHINERY.—Russell & Co., Massillon, O. Paper; 10½ x 7½ ins.; pp. 60.

This firm does a large business in simple and tandem-compound traction engines and portable engines for farm work, which are illustrated and described in detail. The catalogue also illustrates a variety of threshers, stackers and other agricultural machinery.

ELEVATING AND CONVEYING MACHINERY, Power Transmitting Machinery, etc.—The Aultman Co., Canton, O. Catalogue C, 1898. Pamph.; 5¼ x 7¾ ins.; pp. 135.

This pamphlet is an illustrated catalogue and price list of elevators, conveyors, pulleys, shafting, bearings, rope drives, sprocket wheels, etc. It contain many illustrations showing practical applications of hoisting and conveying machinery.

CRUSHERS, PULVERIZERS AND SHREDDERS.—The Williams Patent Crusher & Pulverizer Co., St. Louis, Mo. Paper; 4¼ x 6 ins.; pp. 36.

These machines act by a combination of abrasion and percussion. On the shaft are a series of disks, having studs or bolts on the face, from which are suspended steel bars, each of which has a free arc of movement of about one-third of a circle. After striking a blow the hammer recoils, passing such of the material as is not shattered by the blow. The series of heavy blows reduces the material to powder. The machine has six sets of hammers, 13 to a set, and at 1,000 revolutions per minute the hammers strike 78,000 blows per minute. It has been used for grinding on clay, coal, oil cake, limestone and other material, and for shredding tan bark.

CONSTRUCTION NEWS.

CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

Bids to be opened.	Work.	Place.	See Eng. News.
Nov. 17.	School building, Passaic, N. J.		Nov. 3
Nov. 17.	Water-works, McComb, Miss.		Nov. 3
Nov. 17.	Bridge abutments, etc., Charlemont, Mass.		Nov. 17
Nov. 17.	Stone bridge, Napa, Cal.		Nov. 17
Nov. 17.	Repairing asphalt, Scranton, Pa.		Nov. 17
Nov. 18.	Lighting fixtures, Omaha, Neb.		Nov. 17
Nov. 18.	Stone curb and gutter, Middletown,, O.		Nov. 17
Nov. 18.	Pipe sewers, Etna, Pa.		Nov. 17
Nov. 18.	Building materials, Chemawa, Ore.		Nov. 3
Nov. 19.	Local sewers, Evansville, Ind.		Nov. 3
Nov. 19.	Wooden wharf, Washington, D. C.		Nov. 10
Nov. 19.	Electric light plant, Concord, Mass. Advertised, Engineering News, Nov. 10.		Nov. 10
Nov. 19.	Snow dump, Chicago, Ill.		Nov. 17
Nov. 19.	Pipe sewers, Coshocton, O.		Nov. 17
Nov. 19.	Brick paving, curb, etc., Council Bluffs, Ia.		Nov. 17
Nov. 21.	Collection of garbage, Woodmont, Conn.		Nov. 17
Nov. 21.	Ambulance, New York, N. Y.		Nov. 17
Nov. 21.	Power plant, Ottawa, Ont.		Nov. 17
Nov. 21.	Heating, ventilating, etc., New York		Nov. 17
Nov. 21.	Concrete walks, etc., New Haven, Conn.		Nov. 17
Nov. 21.	Brick and pipe sewers, Rankin, Pa.		Nov. 17
Nov. 21.	Boilers and machinery, Detroit, Mich. Advertised, Eng. News, Nov. 17 and 24.		Nov. 17
Nov. 21.	Macadamizing, Plainfield, N. J.		Nov. 10
Nov. 21.	Bridges, Los Angeles, Cal.		Nov. 10
Nov. 21.	Brick sewers, Toledo, O.		Oct. 27
Nov. 21.	Naval supplies, St. Augustine, Fla. Advertised, Eng. News, Oct. 27 to Nov. 17.		Oct. 27
Nov. 21.	Government bldgs (8), Sophia, Bulgaria		Sept. 29
Nov. 21.	Paving, etc., Lynchburg, Va.		Nov. 17
Nov. 21.	Paving a viaduct, Atlanta, Ga.		Nov. 17
Nov. 21.	Electric plant, Danville, Ill.		Nov. 17
Nov. 22.	Levee work, New Orleans, La.		Nov. 17
Nov. 22.	U. S. building, Norfolk, Va. Advertised Eng. News, Oct. 27 and Nov. 3.		Oct. 27
Nov. 22.	Bridge foundations, Washington, D. C. Advertised, Engineering News, Nov. 3.		Nov. 3
Nov. 22.	Electric plant, Fredericksburg, Va. Advertised, Eng. News, Nov. 10 and 17.		Nov. 10
Nov. 22.	Chemical engine, Jersey City, N. J.		Nov. 17
Nov. 22.	Boilers (5), Boston, Mass.		Nov. 17
Nov. 22.	Hospital buildings, Brooklyn, N. Y.		Nov. 17
Nov. 23.	Sewers, Elkhart, Ind.		Nov. 10
Nov. 23.	Buildings, Buffalo, N. Y.		Nov. 17
Nov. 23.	Street bonds, Rockville, Md.		Nov. 17
Nov. 23.	Street bonds, Hyde Park, O.		Nov. 17
Nov. 23.	Park work, Newark, N. J. Advertised, Engineering News, Nov. 17.		Nov. 17
Nov. 24.	Sidewalks, etc., Kansas City, Mo.		Nov. 17
Nov. 24.	Brick sidewalk, Huntington, W. Va.		Nov. 3
Nov. 25.	Water pipe, etc., Honolulu, H. I.		Oct. 27
Nov. 25.	Rebuilding wall, New York, N. Y.		Nov. 10
Nov. 25.	Rebuilding pump, Cleveland, O.		Nov. 10
Nov. 25.	Cleaning streets, Cleveland, O.		Nov. 10
Nov. 25.	Portable pump, Cleveland, O.		Nov. 17
Nov. 25.	Sewer connections, etc., N. Soldiers' Home		Nov. 17
Nov. 26.	Court house, Danbury, Conn.		Nov. 17
Nov. 26.	Boilers, Brooklyn N. Y.		Nov. 10
Nov. 25.	Pipe sewers, Pontiac, Mich. Advertised, Engineering News, Nov. 17.		Nov. 17
Nov. 26.	Crane, Port Royal, S. C.		Oct. 27
Nov. 26.	Boat shelter roof, Mare Island, Cal.		Oct. 20
Nov. 26.	Sawmill, chimney, etc., Mare Island, Cal.		Nov. 3
Nov. 28.	Removing wreck, Port Chester, N. Y. Advertised, Eng. News, Oct. 27 to Nov. 17.		Nov. 3
Nov. 28.	Water-works, Florence, Colo Advertised, Eng. News, Nov. 3 and 10.		Nov. 3
Nov. 28.	Sewers, North Bend, Ind.		Nov. 3
Nov. 28.	Heating plant, Henderson, Colo.		Nov. 3
Nov. 28.	Tubular boilers, (2), San Francisco, Cal.		Nov. 3
Nov. 28.	Removing wreck, Portchester Harbor, N. Y		Oct. 27
Nov. 28.	Electric plant, Denver, Colo.		Nov. 10
Nov. 28.	Tug boat, San Francisco, Cal.		Nov. 10
Nov. 28.	Mailing platform and shed, New York Advertised, Eng. News, Nov. 10 and 17.		Nov. 10
Nov. 28.	Street bonds, Wellston, O.		Nov. 17
Nov. 28.	Cast-iron pipe sewer, New York.		Nov. 17
Nov. 28.	Boilers, machinery, etc., Detroit, Mich. Advertised, Eng. News, Nov. 17 and 24.		Nov. 17
Nov. 29.	Sewers, etc., Red Bank, N. J. Advertised, Engineering News, Nov. 17.		Nov. 17
Nov. 29.	Condenser tubes, Mare Island, Cal.		Nov. 10
Nov. 29.	Scales, etc., Washington, D. C.		Nov. 10
Nov. 29.	Drain tile, Philo, Ill.		Nov. 17
Nov. 29.	Water-works, Ft. Berthold, N. Dak.		Nov. 3
Nov. 30.	Dry dock, Algiers, La.		Oct. 20
Nov. 30.	Bridge, etc., and plans, Moline, Ill. Advertised, Eng. News, Oct. 6 and 13.		Oct. 6
Nov. 30.	Water-works, McKinney, Tex.		Nov. 10
Nov. 30.	Steel arch bridge, Victoria, B. C.		Nov. 10
Nov. 30.	Temporary drain, New York.		Nov. 17
Nov. 30.	Power plant, Orillia, Ont.		Nov. 17
Dec. 1.	Bonds, Madisonville, O.		Nov. 17
Dec. 1.	Suction pipe, etc., Three Rivers, Que.		Nov. 17
Dec. 1.	Electric plant, Somerville, Tenn.		Nov. 17
Dec. 1.	Water-works, Somerville, Tenn.		Nov. 17
Dec. 1.	Water-works, E. Grand Forks, Minn.		Nov. 17
Dec. 1.	Power plant, Brandon, Vt.		Nov. 17
Dec. 1.	Electric light plant, Clinton, Ill.		Nov. 10
Dec. 1.	Business building, Cleburne, Tex.		Nov. 10
Dec. 1.	Seawall, S. I., N. Y. Advertised, Eng. News, Nov. 10 and 17.		Nov. 10
Dec. 1.	Garbage collecting, Jersey City, N. J.		Nov. 10
Dec. 1.	Electric lighting, Sumter, S. C.		Oct. 6
Dec. 1.	Electric light plant, Clinton, Ill.		Oct. 13
Dec. 2.	Arc lighting, Asheville, N. C.		Oct. 13
Dec. 5.	Pumping engine, Oil City, Pa. Advertised, Eng. News, Oct. 27 to Nov. 10.		Oct. 27
Dec. 5.	Removing wreck, Philadelphia, Pa.		Nov. 10
Dec. 5.	Water-works, West Tampa, Fla. Advertised, Eng. News, Nov. 10 to 24.		Nov. 10
Dec. 5.	Court house, Garner, Ia.		Nov. 10
Dec. 6.	Canal, Tampico, Ill. Advertised, Eng. News, Nov. 10 to Dec. 1.		Nov. 10
Dec. 6.	Street bonds, Springfield, O.		Nov. 3
Dec. 6.	School building, Sacramento, Cal.		Nov. 17
Dec. 7.	Changing Van Buren St. bridge, Chicago, Ill.		Oct. 20
Dec. 7.	Torpedo storehouse, Fort Caswell, N. C. Advertised, Eng. News, Nov. 10 to Dec. 1.		Nov. 10
Dec. 8.	Bridge approach, Zanesville, O.		Nov. 10
Dec. 10.	Intercepting sewers, Washington, D. C Advertised, Engineering News, Nov. 3.		Nov. 3
Dec. 10.	Crane (100 tons capacity), Brooklyn, N.Y.		Nov. 10
Dec. 12.	Paving, curbing, etc., Dayton, O.		Nov. 17
Dec. 15.	Storm sewers, Denver, Colo.		Oct. 13
Dec. 19.	Tunnel sewer, Newburg, N. Y. Advertised, Eng. News, Nov. 17 and 24.		Nov. 17
Dec. 21.	Court house annex, Atlanta, Ga.		Nov. 3
Dec. 22.	Bridge superstructure, Lorain, O. Advertised, Eng. News, Nov. 10 and 17.		Nov. 10
Dec. 23.	Light station, Tompkinsville, (S.I.), N. Y. Advertised, Eng. News, Nov. 17 and 24.		Nov. 17
Dec. 28.	Railway bridge, Chicago, Ill.		Nov. 17
Dec. 31.	Plans for station, etc., Stockholm, Sweden		June 23
Jan. 1.	City hall plans, Bridgeport, Conn.		Aug. 18
Jan. 1.	Draw bridge, Cathlamet, Wash.		Nov. 17
Jan. 1.	Water-works, Pasadena, Cal.		Nov. 17
Jan. 2.	Bridge, Quebec, Que. Advertised, Eng. News, Sept. 29 and Oct. 6.		Sept. 29
Jan. 2.	Arc lighting, Vincennes, Ind.		Oct. 27
Jan. 6.	Water-gas plant, Johannesburg, So. Africa		Oct. 27
Jan. 6.	Extension, electric plant, Johannesburg, S. Af.		Oct. 27
Jan. 14.	Park work and plans, Philadelphia, Pa.		Nov. 17
Jan. 24.	Footway tunnel, London, England.		Nov. 10
Feb. 2.	Electric lighting, New Orleans, La.		Nov. 3
Feb. 10.	Jail building, Keyser, W. Va.		Sept. 29
Apr. 30.	Water-works, Persia, Ia.		Nov. 17

RAILWAYS.

ALABAMA.—Dunn & Lelande Bros., who have the contract to grade the right of way for the new railway to be built for the Pioneer Mining & Mfg. Co., from its furnaces at Thomas, Ala., to North Birmingham, where a new mine is being opened, began work on their contract Nov. 7. Thirty teams are at work and it is expected that the 4½ miles of road will be graded and trestles built within 60 days; estimated cost, $50,000.

ALLEGHENY VALLEY.—Plans are under consideration for the general improvement and enlargement of the yards of this company at 16th and Pike Sts., Pittsburg, Pa., the work to begin early next spring. The Low Point tunnel, 700 ft. in length, on the low grade division, is now being arched; the stone foundations for the arch have just been completed. D. McCargo, Gen. Supt., Pittsburg, Pa.

ARKANSAS & CHOCTAW.—W. H. Carson, Supt., Texarkana, Ark., is quoted as stating that grading has been completed on this road to a point 12 miles from the Arkansas line. The length of the route at present is 51 miles, and extends from Ashdown to Choctaw City, Ark.; the proposed extension is towards Anoka, Ind. Ter., where a connection will be made with the Missouri, Kansas & Texas Ry.

ATLANTIC COAST LINE.—We are informed that Abercrombie & Williams, Montgomery, Ala., and not the A. & C. Wright Co., as stated in our last issue, have been awarded the contract for constructing the extension of the Charleston & Western branch from Denmark to Robbins, S. C., 34.7 miles, including all the earth and trestle work. F. Gardner, Ch. Engr., Charleston, S. C. Abercrombie & Williams also inform us that they will have the work covered by Dec. 1.

BALTIMORE & OHIO SOUTHWESTERN.—Reports state that this company has begun its proposed series of improvements by beginning the laying of 5,000 tons of 85-pound steel rails between Chillicothe, O., and Parkersburg, W. Va.

BELLAIRE, ZANESVILLE & CINCINNATI.—As a result of the oil boom in this section of Ohio, this company is said to contemplate the changing of its road to standard gage between Woodfield and Bellaire, a distance of about 35 miles. J. K. Geddes, Recr. and Gen. Mgr., Zanesville, O.

CAPE FEAR & NORTHERN.—J. M. Bandy, Ch. Engr., Greensboro, N. C., informs us that surveys have been completed for 20 miles, and the right of way secured, Gibson & Carpenter, of Holly Springs, N. C., have graded 14 miles of the line and laid three miles of track; they expected to be at Holly Springs on Nov. 12. Work is being rapidly pushed between Apex and Williams, via Holly Springs and Blanchards, 20 miles. The length of completed line will probably be 150 miles. Pres., B. N. Duke, Durham, N. C.

CHICAGO, FORT MADISON & DES MOINES.—Press reports state that this line will be sold at Keokuk, Ia., Jan. 5, under a decree of foreclosure brought by the American Loan & Trust Co., of Boston.

CHICAGO ST. LOUIS & TEXAS AIR LINE.—Reports state that the right of way has been obtained for this proposed railway from San Antonio to Brownsville, Tex., a distance of 280 miles, and that propositions to construct the line will now be considered. Pres., D. Griffin Gunn, San Antonio, Tex.

CHOCTAW & MEMPHIS.—We are informed that bids were to be opened on Nov. 11, and awarded Nov. 12, for the construction of this company's line from Howe, Ind. Ter., to Little Rock, Ark., a distance of 164 miles. F. A. Molitor, Ch. Engr., Little Rock, Ark.

COLUMBIA & WESTERN.—Press reports state that 5,000 men are now at work on the construction of this proposed branch of the Canadian Pacific system from Robson through the Gold Range mountains to Midway, B. C., a distance of 105 miles. No track has yet been laid. This undertaking is said to be one of the heaviest and most difficult pieces of work in the Northwest. There will be 5,300 ft. of tunnels, requiring the removal of about 66,000 cu. yds. of material, and numerous bridges and trestles. Foley Bros. & Larson are the contractors.

COLUMBUS, LIMA & MILWAUKEE.—The contract for ties, track-laying, ballasting, etc., on this line from Lima to Defiance, via Gomer and Continental, O., a distance of 40 miles, is reported to have been awarded to A. Brown, Ottawa, O. The rails will be supplied by the Johnson Steel Co., Lorain, O. Part of the roadbed and the bridges for this railway were built eight years ago, and have since lain idle. Pres., J. G. W. Cowles, of the Cleveland Trust Co., Cleveland, O.

DENVER & RIO GRANDE.—Reports state that the Veta Pass route of this line will soon be made standard gage as far as Alamosa, Colo. M. H. Rogers, Ch. Engr., Denver, Colo.

DULUTH, MISSISSIPPI RIVER & NORTHERN.—Reports state that this company will soon commence surveys for the location of a new line from Hibbing, Minn., to the Canadian boundary, and that it will build into Duluth within a year. I. N. Gray, Ch. Engr., Swan River, Minn.

FOURTH POOL CONNECTING.—This company was incorporated in Pennsylvania, Nov. 7, with a capital stock of $150,000 to construct a steam railway between Charleroi and Jefferson township, Fayette county, Pa. The incorporators are: Samuel A. Roelofs, Pres., and H. P. Richardson, both of Ellwood City, Pa.; Albert McNamee, McKees Rocks, Pa.; Jos. F. Ryan and Chas. F. Patterson, of Pittsburg.

GALVESTON LA PORTE & HOUSTON.—L. J. Smith, 313 American Bldg., Kansas City, Mo., has bought this Texan railway, and intends to extend it in a northerly direction.

GREAT EASTERN.—J. H. McCleary, Gen. Mgr., Suffolk, Va., informs us that contracts will be let in December for the construction of this proposed line from Selma to Leechville, on the Pungo River, via Snowhill, Lizzie, Winterville, Washington, Pantego and Fairfield, N. C., a distance of 130 miles. Surveys have been completed and the right of way and capital about secured. Pres., J. W. Lynch, Kinston, N. C.; Ch. Engr., E. F. Hurt, 41 West 74th St., New York.

GULF, BEAUMONT & GREAT NORTHERN.—Jas. F. Weed, Ch. Engr., Beaumont, Tex., informs us that a preliminary survey has just been completed on this line from Beaumont to Waskom, Tex., and the location of the same made from Waskom to Jefferson. The total distance from Beaumont to Jefferson is 210 miles.

JAMESTOWN TERMINAL.—This company was incorporated in New York, Nov. 9, with a capital stock of $50,000, to construct one mile of steam railway in Jamestown, N.Y. The directors are John W. Doubleday, of Jamestown, and others.

LOUISIANA, NORTH & SOUTH.—Reports state that this company has been incorporated to construct a railway from New Orleans, La., to Fort Smith, Ark., via Arcadia and Hot Springs, a distance of 325 miles. A. L. Atkins, Vice-Pres., Arcadia, La.

MICHIGAN.—Reports state that the Mohawk Mining Co. has ordered steel for the extension of the Traverse Bay Ry., and will complete the line before winter. A new stamp mill, costing $150,000, will be built on Lake Superior, taking water from Tobacco River.

NORTHERN MICHIGAN.—C. A. Wright, of Hancock, Mich., is interested in a new line of railway to be built from Calumet to Watersmeet, Mich., a distance of about 90 miles, connecting with the Chicago & Northwestern Ry. at the latter place. The final survey will be made soon and construction work begun in the spring.

NOVA SCOTIA.—At a recent meeting of the ratepayers of Amherst, N. S., it was decided to grant a subsidy towards the construction of a railway from Amherst to North Port, on the Northumberland Straits, a distance of about 20 miles, which will open up coal and agricultural districts.

PITTSBURG, BRADY'S BEND & LAKE ERIE.—Harwood R. Pool, Secy., 62 Cedar St., New York, informs us that all the surveys have been made and one-third of the right of way obtained for this proposed line from Brady's Bend to Butler, Pa., a distance of 20 miles. Not all of the capital necessary for construction has yet been secured. Pres., Joseph Pool, New York; Ch. Engr., J. D. Haggerty, East Brady, Pa.

ST. LOUIS, PEORIA & NORTHERN.—The Laclede Construction Co., St. Louis, Mo., is reported to have been awarded the contract for the construction and equipment of a branch of this line from Clinton to Chicago, via Peoria, Ill., requiring about 250 miles of new track, to be known as the St. Louis & North Shore Line. Pres., W. E. Guy, St. Louis, Mo.

SANDYVILLE & WAYNESVILLE.—This company has been incorporated in Ohio, with a capital stock of $50,000, to construct a railway from Waynesville to a connection with the Cleveland Terminal & Valley R. R. at Sandyville. The directors are F. H. Goff, C. H. Gale, F. H. Bushnell, John H. Smart, John E. Morley.

SHREVEPORT & RED RIVER VALLEY.—Contracts will be let on Nov. 20, according to reports, for the construction of an 11-mile extension. Work is expected to be completed to Campti, La., by Dec. 1. Clarence Ellerbe, Pres. Louisiana Construction Co., Shreveport, La.

TALLAHASSEE & SOUTHEASTERN.—The first section of this new line has been completed as far as the Wacissa River, 20 miles from Tallahassee, Fla. It is expected to build further to Old Town, on the Suwanee River, a distance of 101 miles, where it will meet the Atlantic, Gulf & Suwanee River R. R., now in course of construction from Starke southeasterly. R. L. Bennett, Vice-Pres., Tallahassee.

TEXAS MIDLAND.—The Craney Construction Co., Paris, Tex., is reported to have been awarded the contract for the construction of the proposed Waco extension of this line, work to begin about Jan. 1. M. Duvall, Ch. Engr., Terrell, Tex.

WASHINGTON RUN.—Taylor & Romine, McKeesport, Pa., inform us that surveys have been made, the right of way and capital secured for constructing this proposed line of steam railway from Layton to Star Junction, Fayette county, a distance of five miles. Bids were closed Nov. 12. Pres., W. Harry Brown, Conestoga Bldg., Pittsburg, Pa.; Ch. Engr., E. J. Taylor, McKeesport.

WATERVILLE & WISCASSET.—President Thayer has been instructed to sign a contract for the construction of this line, with the Kennebec Construction Co., to cost about $260,000.

WYOMING & GRUNDY.—This company has been organized in California with a capital stock of $500,000, to construct a standard gage railway from a point on the Norfolk & Western Ry., near the mouth of Bull Creek, in McDowell county, W. Va., to Grundy, Va., 50 miles. The directors are: R. L. Beardslee, John M. Bonner, Herman de Laguna, E. E. Forrest, and Samuel H. Cohn, all of Stockton, Cal. S. D. Freshman, Secy. of the Sierra Co., is the treasurer.

STREET AND ELECTRIC RAILWAYS.

BELFAST, ME.—Reports state that James Mitchell, a railway contractor and promoter of Bangor, Me., will build about five miles of electric railway in the spring, between Belfast and Northport.

HAMPTON, N. H.—Soule, Dillingham & Co., Boston, Mass., are said to have been awarded the contract for the construction of the Hampton & Amesbury St. Ry., from Hampton through Hampton Falls and Seabrook to the state line, connecting with the Newburyport & Amesbury Ry., by a short link to be built. The new line will be operated by the Exeter Ry. Co.

SALISBURY, VT.—W. T. Dewey, E. D. Blackwell, of Montpelier, Vt., are among the proposed incorporators of the Lake Dunmore Power & Traction Co., which contemplates the construction of a railway through Salisbury, Leicester, Brandon, Pittsfield and Proctor to Rutland.

DEDHAM, MASS.—Work was begun on the construction of the Norfolk Western St. Ry., on High St., Nov. 7. The proposed route is from Medfield to Dedham, via Westwood, nine miles. Pres., W. W. Mitchell, Medfield, Mass.; Engrs., Hodges & Harrington, 60 State St., Boston.

NEEDHAM, MASS.—The selectmen have granted a franchise to the Needham & Boston St. Ry. Co. to lay tracks and operate a line of electric street cars between Post-office Square and the Dedham town line, via Great Plain, Dedham and Harris Aves. The road must be in operation by June 1, 1899.

NEW BEDFORD, MASS.—Reports state that the New Bedford, Middleboro & Brockton St. Ry. Co. was granted a franchise, Nov. 9, to construct and operate its line on the county road between the termination of the Union St. Ry. tracks at Lunds corner and the Freetown line. Work is to be completed before next June. A. P. Smith, of New Bedford, and Fred. C. Hinds, Newton, Mass., are members of the company.

TAUNTON, MASS.—The Taunton & Middleboro St. Ry. Co. has been organized, with a proposed capital stock of $55,000, to construct a street railway from the terminus of the East Taunton St. Ry., in Taunton, through Lakeville, to the location of the New Bedford, Middleboro & Brockton St. Ry., a distance of 5½ miles. The directors are Fred. C. Hinds, Newton; A. M. Bearse, Middleboro; A. P. Smith, New Bedford, and others.

WHITMAN, MASS.—Waldo Dyer, P. O. Box 566, Whitman, informs us that nothing will be done this winter towards building the proposed railway of the Old Colony St. Ry. Co., except to complete the organization of the company. The line will be about 12 miles in length, through a fine country, covering several coach lines, and will probably be built early next year.

NEWPORT, R. I.—The Newport St. Ry. Co. has petitioned the council for permission to extend its tracks from Broadway through Marlborough St. to the Old Colony R. R. station, etc. Pres., G. B. Reynolds, Spring and Franklin Sts.

NEW HAVEN, CONN.—It is reported that the Fairhaven & Westville R. R. Co. contemplates the extension of its lines to Seymour. Pres., H. S. Parmelee, 730 Chapel St.

WILLIMANTIC, CONN.—Report state that a syndicate represented by Jesse W. Starr, of New York, has purchased the franchise for the proposed street railway in this town, and that the construction of the line at an early date is now assured.

NEW ROCHELLE, N. Y.—The Westchester Electric R. R. Co., controlled by the Union Ry. Co., 128th St. and 3d Ave., New York, has filed with the secretary of state, at Albany, a certificate of an extension of its lines in this village.

PASSAIC, N. J.—We are informed that the directors of the Saddle River Traction Co. met, at Passaic, N. J., Nov. 11, and awarded the contract for the construction of the proposed railway from Passaic to Lodi. The line will be double track and will be operated as an extension of the Paterson Ry. Engr., Colin R. Wise, Passaic National Bank Bldg., Passaic.

PITTSTON, PA.—The Pittston & Scranton St. Ry. Co. was incorporated, Nov. 7, with a capital stock of $75,000, to construct an electric street railway from Pittston to Scranton, a distance of three miles. The incorporators are: Jas. A. Steese, Pres.; Chas. H. Mullin and D. A. Dunlevy, of Mount Holly Springs, Pa.; Lane S. Hart and W. H. Metzger, of Harrisburg, Pa.

WAYNESBORO, PA.—The Blue Ridge Electric Ry. Co. has been organized by August Beck and J. Reily Weaver, of Baltimore, Md.; Peter Rouzer, Rouzersville, Pa.; and others for the construction of a line connecting Waynesboro, Pen-Mar, Blue Mountain House, Monterey and Buena Vista.

YORK, PA.—Report state that the York Southern R. R. will convert its lines, covering 37 miles, into a trolley system. Ch. Engr., S. M. Manifold, York.

LEXINGTON, VA.—Reports state that John R. Williams, of Richmond, Va., and owner of Hotel De Hart, contemplates the construction of an electric street railway to the hotel, which is in the suburbs. Engr., A. L. Johnston, of Richmond.

LYNCHBURG, VA.—The Lynchburg & Rivermont St. Ry. Co. has been granted a franchise to build a line to the Durham station and City Park, via 12th St. Pres. and Mgr., H. P. Woodson, 812 Church St.

VICKSBURG, MISS.—E. C. Collins, Supt. of Construction of the North American Ry. Construction Co., Chicago, Ill., has commenced the construction of the Vicksburg Electric St. Ry. The present contract is for the construction of four miles of track, using 60-lb. rails.

CHATTANOOGA, TENN.—Surveys are now under way and plans being prepared for the extension of the narrow gage railway on Lookout Mountain to Rock City, Lookout Inn and other points of interest. L. E. Montague, Pres. of Lookout Incline & Lulu Lake Ry. Co.

EAST LIVERPOOL, O.—A syndicate composed of Chicago, Philadelphia and New York capitalists is said to propose the construction of an electric freight railway between this city and Lisbon, connecting the Erie system with the Ohio River at this point. A bonus of $60,000 is asked of East Liverpool, and of $25,000 of Lisbon. J. L. Francis, of Chicago, is reported interested.

LEXINGTON, IND.—Press reports state that Benjamin Johnson, the engineer who built the Madison Electric St. Ry., has been engaged by Enoch H. Fudge and other Chicago capitalists to examine into the feasibility of constructing an electric railway from Lexington, on the Baltimore & Ohio R. R., through Hanover and Madison to Vevay, a distance of 40 miles.

HOUGHTON, MICH.—The council has granted a franchise for a street railway through this village to Wm. H. Taylor, of New York, according to reports, provided that enough franchise be secured to build a belt line about the county connecting Houghton, Hancock, Quincy, Franklin, Dollar Bay, Lake Linden, South Lake, Linden, Laurium, Calumet and Red Jacket; a distance of about 20 miles.

OWOSSO, MICH.—Reports state that a party of Detroit capitalists has taken the initiative toward getting a franchise in this city and Corunna for an electric railway which will combine with the interurban road now running from Detroit to Sylvan Lake.

CHICAGO, ILL.—The United Traction Co. was incorporated at Springfield, Nov. 7, with a capital stock of $500,000, by Albert E. Wilson, Aaron F. Meanor and L. J. Bean, 908 Stock Exchange Bldg., Chicago.

KANSAS CITY, MO.—A franchise has been granted by the county court to the Jackson County Electric Ry. Co. for the construction of a double track electric railway on Prospect Ave., from the city limits to Dodson and Swope Park, about five miles. The company is under $1,000 bond to have the road in operation within one year. The incorporators of the company and also of the Missouri Electric Ry. Co., are: F. W. Sears, B. F. Burd, W. H. Brown, Dr. Chet McDonald, Henry Smith. The Missouri Electric Ry. Co. will operate the city end of the line; it was incorporated a month ago. A power house to cost about $40,000 will be erected at Brush Creek and Prospect Ave.

EL PASO, TEX.—B. F. Hammett, Leigh Clark, J. J. Taylor and others are said to have been granted a franchise for an electric railway and electric light plant in this city.

PORTLAND, ORE.—An ordinance has been passed granting a franchise to the City & Suburban Ry. Co. to construct and operate a tramway on 22d St., from Savior St. to St. Helena County Road. Pres., H. Failing, 3d and Yamhill Sts.

LOS ANGELES, CAL.—Reports state that electricity as a motive power will be installed on the Glendale branch of the Los Angeles Terminal Ry. within 90 days. The Pasadena line will probably be equipped in the same manner as soon as the franchise can be secured. T. E. Gibbon, Vice-Pres. and Gen. Mgr., Los Angeles.

OTTAWA, ONT.—The city has taken action to compel the Ottawa Electric Ry. Co. to extend its Elgin St. line to the exhibition grounds. Pres., J. W. McRae, 337 Albert St.

VICTORIA, B. C.—William Jensen and Lawrence Goodacre have given notice of application for the incorporation of the Hardy Bay Tramway Co., to construct an 8-mile electric tramway from Hardy Bay to Cold Bay, Quatsino Sound.

CAMPECHY, MEX.—Press reports state that a street railway line is to be built in this city; population, about 16,000.

CHIHUAHUA, MEX.—It is positively stated that the Chihuahua capitalists will construct an electric railway in this city of 12,000 inhabitants.

MEXICO, MEX.—An entire new roadbed is now being constructed in this city for the new system of electric traction; it is expected to lay 26 miles of 85-lb. rails as soon as possible. The power house will contain three boilers of the Babcock & Wilcox type and three McIntosh & Seymour engines; the nominal horse power of the plant is calculated at 1,200. The General Electric Co. will furnish the electrical plant, the cars being equipped with 70-HP. motors. The J. G. Brill Co., of Philadelphia, is also said to be constructing 30 cars for the line.

HAVANA, CUBA.—Press reports state that the entire street railway system of Havana, about 25 miles in length, has been sold to an English stock company for $1,600,000. The motive power will probably be changed from horses to electricity.

TOKIO, JAPAN.—It is announced that the International Air Power Co., owning the Hoadley-Knight compressed air system for foreign shipment, has just closed a contract with Fraser & Co., 63 Wall St., New York, and Yokohama, for compressed air street cars to be installed in Tokio.

VIENNA, AUSTRIA.—The Siemens & Halske Electric Co., of Chicago, is reported to have been awarded a contract to install electricity on the tramway systems of Vienna, covering about 100 miles of road.

ELECTRIC LIGHT AND POWER.

BRANDON, VT.—E. D. Blackwell, Montpelier, Vt., and Brandon, writes us that bids will probably be received about Dec. 1 for furnishing the materials and for constructing the proposed water-power plant, to cost about $75,000. The plant will have 375-ft. head, 1,200 HP. There will be a 1,000-HP. impulse wheel, 600-K-W. alternating generator, 3,000 ft. of steel penstock, transformers, to step-up to 15,000 volts and back to 2,000 volts; 65,000 lbs. of copper wire, etc.

SANDY HILL, N. Y.—The Sandy Hill Electric Light Co. is considering estimates for additional arc and incandescent dynamos, according to reports. J. E. Howland, Pres.; H. P. Galley, Supt.

SENECA FALLS, N. Y.—Press reports state that Mr. H. H. Crowell, of Syracuse, N. Y., has been appointed receiver for the Seneca Electric Light & Power Co., embracing the plants at this place and Waterloo. The action was brought about by the Old Colony Trust Co., of Boston, as trustees of the company's bonds.

CAMDEN, N. J.—The council is reported to have granted a franchise to the Citizens Light, Heat & Power Co.

PHILADELPHIA, PA.—The Southern Electric Light & Power Co. proposes to increase its capital stock from $400,000 to $2,000,000. It is stated that the company will enlarge its plant. A meeting to decide the question will be held Nov. 23. Wm. J. Manning, Secy.

PHILADELPHIA, PA.—H. Brockelhurst, Philadelphia, has the contract for building an addition to the power house of the plant of the Midvale Steel Co., at Nicetown. The addition will be 30×115 ft.

PITTSBURG, PA.—G. H. Winslow, 339 Fifth Ave., Pittsburg, is preparing plans and specifications for an electric light plant in this vicinity for a manufacturing company.

READING, PA.—Geo. Hensher and Michael McDonough are reported as considering estimates for a plant for the building of the St. Peter T. A. B. Society.

WRIGHTSVILLE, PA.—Wm. A. Chapman & Co., 49 Westminster St., Providence, R. I., have been awarded the contract for the development of power, including the building of a concrete dam and power-house on the Susquehanna River, Wrightsville, for the Martic Water & Power Co. In our issue of Nov. 3 we incorrectly reported that this contract had been let to the Walter Bradley Construction Co., Oswego, N. Y.

PENNSBORO, W. VA.—The Collins Co. writes us that the company wants to purchase a plant of about 100 16-c.p. incandescent lights for the mill, and also an engine to run the same.

CHESAPEAKE BEACH, MD.—It is stated that a site has been located for the plant and the water-works at the Beach for the Chesapeake Beach Ry. Co., Washington, D. C. Geo. Cadogan Morgan, Engr., 808 Royal Insurance Bldg., Chicago, Ill.; Otto Mears, Pres., Washington.

HAGERSTOWN, MD.—Mayor Edwin M. Schindel writes us that the matter of a plant and a sewerage system are in the hands of the committees. No definite action will be taken for some months. Charles Webb, Chn.

WILLIAMSPORT, MD.—D. G. Adelsberger, 722 Pennsylvania Ave., Baltimore, Md., is preparing plans for a plant and water-works for this city.

PENNSBORO, W. VA.—The Collins Co. is reported as wanting estimates for a plant of 100 16 c.p. incandescent lights.

DECATUR, ALA.—R. D. Smith, of a Birmingham company, is reported as making an effort to secure permission to build a plant here.

THIBODAUX, LA.—This place voted Nov. 8 to issue bonds for a plant. F. Zermott, Mayor.

SOMERVILLE, TENN.—Bids are asked until Dec. 1 for furnishing and installing a plant and water-works, to cost about $10,000. The plant will have a capacity for furnishing about 15,2,000 c.p. arc and 750 16 c.p. incandescent lights. Geo. C. Morgan, Engr., 808 Royal Insurance Bldg., Chicago; W. D. Scruggs, Chn. Com.; E. R. Scruggs, Recdr.

LIMA, O.—We are informed that this city proposes to either build a plant or let a contract for about 300 arc lights. J. K. McClurg, Chn. Com.

MILFORD, O.—It is stated that the council is considering the question of granting a franchise.

NEW RICHMOND, O.—H. Buckley, Pres. Electric and Water-Works Trustees, writes us that plans and specifications for a plant and water-works will be completed soon and that bids will probably soon be asked. J. F. Witmer, Des. Engr., 705 Ellicott Square, Buffalo, N. Y.; Chas. R. Day, Cy. Clk.

PERRYSVILLE, O.—E. H. Vanderslice writes us that it proposed to put in a water power plant as soon as arrangements can be completed. Estimates for a plant are now being considered.

WOOSTER, O.—W. E. Lee writes us that the city has made a contract with the old company and will therefore not build a plant, as has been reported.

CARO, MICH.—We are informed that bids will be asked next spring by the Caro Light & Power Co., just incorporated, for building a water and steam power plant, to cost about $25,000. O'Keefe & Orbison, Engrs., Appleton, Wis. J. H. Harris may be addressed.

KALAMAZOO, MICH.—The Kalamazoo Electric Co. has been granted permission to extend its plant, erect towers, and make a number of other important improvements to its plant. Work is said to have already been begun.

LANSING, MICH.—The committee has recommended that $1,200 be appropriated for the purchase of a 100-HP. engine, etc., for the light plant. Commissioner Earle, Chn. Com., may be addressed.

LANSING, MICH.—Local papers state that a company is organized to build a plant to light several blocks in the business portion of the city. C. P. Downey, of Downey's Hotel, and J. J. Baird are interested.

DANVILLE, ILL.—Bids are asked until Nov. 21 for furnishing the materials and for building a municipal plant. E. R. E. Kimbrough, Mayor; E. E. Boudinot, Chn. Com.

UPPER ALTON, ILL.—The village board is reported to have decided to change the public lighting from arc to incandescent lights.

MARSHFIELD, WIS.—John H. Thomas, Cy. Clk., writes us that the committee is considering the question of building a plant. Population 6,000. Henry Kolsched, Chn.; W. H. Kamps and P. J. Kraus are on the committee.

SUN PRAIRIE, WIS.—C. B. Hayden writes us that some bids for a plant have already been received. The plant will have a 50 HP. engine, 60 to 75 HP. boiler, a 350 to 500-light dynamo, etc. The wire has already been ordered; estimated cost of plant, $4,000.

WARRENS, WIS.—The Geo. Warren Co. has let the contract for a 300 incandescent light plant to Thos. Benson & Sons, of La Crosse, Wis.

E. GRAND FORKS, MINN.—Bids are asked until Dec. 1 for furnishing the materials and for building a plant and water-works, according to reports. W. I. Gray & Co., Engrs., Sykes Bldg., Minneapolis, Minn.

WINONA, MINN.—W. L. Raymond, Pres. Council, writes us that the committee is investigating the question of a municipal plant; it will report by Jan. 1. F. E. Gartside, Pres. Com.

OMAHA, NEB.—Bids are asked until 2 p. m., Nov. 18, for furnishing and placing combination gas and electric lighting fixtures in the court house and postoffice building of this city. O. L. Spaulding, Acting Secy., Treasury Department, Washington, D. C.

CARTHAGE, MO.—The question of issuing $25,000 in bonds for a city plant will be voted upon Nov. 22. The present light contract expires in August.

ST. LOUIS, MO.—Local papers state that it is probable that the board of public improvements will send an ordinance to the municipal assembly providing for a municipal electric plant. President McMath has expert assurances that such a plant could be erected by Jan. 1, 1900, when the present contract expires. The board is forced to this alternative by the persistency of the council in filing bills for letting a lighting contract. If the council turns down the municipal ordinance then the board will have to let a temporary contract.

WYNNE, ARK.—M. Jolly, Secy., Bd. of Improvements, writes us that G. Jaeger, Batesville, Ark., was awarded the contract Nov. 10, at $15,490, for building a plant and water-works.

EL PASO, TEX.—B. F. Hammett, Leigh Clark, J. J. Taylor and others have been granted a franchise for a light plant and street railway, according to reports.

IDAHO SPRINGS, COLO.—Press reports state that Aug. R. Specht, 24 Devonshire St., Boston, Mass.; H. P. Malone, of Cleveland, and A. H. Johnson, Pres. Arkansas Midland R. R. Co., Helena, Ark., are interested in a power plant project on Clear Creek, several miles from this place. It will be used for furnishing power to mining plants. Right of way has been bought. Bids will soon be asked for furnishing machinery for developing, for 5,000 HP.

DAVENPORT, WASH.—R. H. Robinson, Arlington, Wash., it is stated, will build plants at this place and at Wilbur.

SAN BERNARDINO, CAL.—The plant of the San Bernardino Electric Co. is to be extended, according to reports.

CAMPBELLTON, N. B.—Duncan & McLellan, Campbellton, have been awarded the contract for a plant for this place, at $12,950.

HALIFAX, N. S.—The city engineer is reported to have been directed to prepare plans for a municipal plant. The committee estimates that it will cost about $54,335 to build the plant and $18,925 a year to maintain and operate it.

MAGOG, QUE.—W. W. Chalmers, Mayor, writes us that the proposed issue of bonds is to pay for the additions to the plant already made.

MONTREAL, QUE.—Prof. R. B. Owens, of the Electrical Engineering Dept., McGill University, writes us that $30,000 has been donated by W. C. McDonald, of Montreal, for the re-equipment of the department. The new apparatus includes direct and alternating current machinery, batteries, measuring instruments, etc.

ORILLIA, ONT.—Bids are asked until Nov. 30 for furnishing the materials and for building a power transmission plant at a point on the Severn River. The plant will consist of the following: Alternating current generators, two of 300 k.w. capacity each; step-up and step-down transformers, 600 k.w. capacity; transmission line and construction, 18 miles; switchboard equipment, for generating and receiving stations; hydraulic machinery, including masonry construction. The plant will cost about $75,000, as stated last week. R. J. Parke, Elec. Engr., 319 Temple Bldg., Toronto, Ont.; C. J. Miller, Chn. Com.

OTTAWA, ONT.—Bids are asked until Nov. 21 for installing a power house and electric plant for operating the locks, bridges and other structures along the Soulanges Canal, and also for lighting the canal its entire length. L. K. Jones, Secy., Dept. Rys. & Canals, Ottawa.

TORONTO, ONT.—The Anglo-American Electric & Supply Co., among others, submitted a proposition to the board of control Nov. 9 offering to supply electric power to light the city streets and supply energy for manufacturing purposes at the rate of 1 ct. a horse-power per hour. Its capital will be $5,000,000, and when the dividends reach 10% it offers to light the streets at cost price. It will also establish a manufactory for electric supplies, and the profits of this will come under the same agreement. The proposed plant will cost about $1,000,000, exclusive of site and wiring. G. P. Magann, Dr. R. A. Pyne, M. P. P., and G. S. Ransom are interested.

PUEBLA, MEX.—Press reports state that C. J. S. Hall, Arch., Puebla, is interested in a water-power project.

BRIDGES.

CHARLEMONT, MASS.—Bids are asked until Nov. 17 for constructing stone abutments and wing walls for a bridge. T. C. Mendenhall, Chn. Massachusetts Highway Comn., Boston.

WOONSOCKET, R. I.—Frank H. Mills, Cy. Engr., writes us that the proposed work at the Globe bridge consists of tearing down one stone arch and constructing a longer and wider one in its place, the extension of another stone arch, the widening of the street and the building of heavy retaining walls, with the necessary excavation, filling, etc.; estimated cost, $34,600. The work will not be done this year, and perhaps not next.

BUFFALO, N. Y.—The grade crossing commission has approved the plans submitted by Engineer Guthrie for a subway at South Division St., and for a bridge at Elk St. and Abbott Road. It is proposed to let the contracts early next spring.

CANASTOTA, N. Y.—Plans have been prepared by the state engineering department, Albany, for a hoist bridge over the Erie Canal at Peterborough St. A copy of the plans are on file at the office of Village Clerk Bell.

HOOSICK FALLS, N. Y.—The town board awarded a contract Nov. 13 to the Massillon Bridge Co. of Massillon, O., at $2,728, for constructing six small bridges.

NEW HACKENSACK, N. Y.—The town board of Wappingers has awarded a contract to the Groton Bridge & Mfg. Co., Groton, N. Y., at $1,095, for constructing a steel bridge 50 x 20 ft.

SYRACUSE, N. Y.—Reports state that $4,000 has been appropriated for the removal and placing of the old swing bridge over the Oswego Canal, at the foot of Butternut St. The city clerk has been authorized to ask bids. Russell R. Stuart, Cy. Engr.

NEWARK, N. J.—Jas. F. Kelly, Township Clk., Arlington, N. J., informs us in regard to the report of Engineer Fritcher, on the dangerous condition of the bridge over the Erie R. R. at Kearney Ave. and 4th St. The structure is 140 x 20 ft., and has at present a capacity of 35 lbs. per sq. ft. No plans have yet been made. The township committee is trying to compel the Erie R. R. Co. to put this bridge in suitable condition. The matter is in the hands of the Grand Jury.

FRANKSTOWN, PA.—The Baltimore & Ohio R. R. Co. will construct a bridge across 2d Ave., for the extension of a track, which is now being built, to encircle the Pennsylvania Tube Works, to cost about $15,000, according to reports.

JACKSON, MISS.—The council has authorized the issuance of $18,400 of bonds for building bridges, according to reports.

SOMERVILLE, O.—L. A. Dillon, Surv., Hamilton, informs us that he is preparing plans for the construction of a bridge over Seven Mile Creek, near this place.

CHICAGO, ILL.—Bids are asked until Dec. 28 for furnishing the material and for constructing the substructure and superstructure of an eight-track railway bridge, over the main drainage channel. Jas. Reddick, Clk. Bd. Sanitary Trustees.

ST. PAUL, MINN.—L. W. Rundlett, Cy. Engr., is preparing plans for the widening of the south approach of the Wabasha St. bridge, by constructing a fill for 250 ft. and doing away with the last two spans. A roadway, 36 ft. wide, and two 10-ft. sidewalks will be provided; estimated cost, about $100,000.

ATCHISON, KAN.—Reports state that, provided the Atchison Bridge Co. does not submit to the terms of the railway companies by Dec. 1, an offer will be made to the Missouri Valley Bridge Co., Leavenworth, Kan., of $400,000 in bonds, for the construction of the proposed railway bridge.

CATHLAMET, WASH.—Bids are asked until Jan. 1 for building a draw bridge, according to reports. Elmer B. Cotwell, Audr.

TACOMA, WASH.—The council street committee and the county commissioners considered a proposition Oct. 29 to construct a bridge about 165 ft. long over the Puyallup River, on 11th St. It is proposed to extend the street about 1,200 ft. on the east side of the river.

NAPA, CAL.—Bids are asked until 10.30 a. m., Nov. 17, for constructing a stone bridge across Fagen Creek. N. W. Collins, Clk., Bd. Supervisors.

BUILDINGS.

BARRE, VT.—Phelps Bros. have been awarded the contract for the plumbing and heating of the city building, at $3,813.

BOSTON, MASS.—J. M. Meredith, 15 Congress St.; J. Murray Howe, 28 State St., and others, are said to be behind a project to erect a 6-story building on the site of the Old Boston & Albany R. R. station on Beach St., for the wholesale shoe trade; estimated cost, $500,000. Archs., Peabody & Stevens, 919 Exchange Bldg.——Plans have been prepared by Winslow & Wetherell, 3 Hamilton Place, according to reports, for an 8-story fireproof business building, at Essex and South Sts., for the Wm. R. French heirs.——Plans have been prepared for six brick and stone flat buildings, to be erected at Dorchester for J. J. Connell and Joseph Green, to cost about $90,000. Archs., J. F. & G. H. Smith, 13 School St.——A number of store and apartment buildings will be erected at Roxbury, according to reports, for C. F. Ayer, Lowell, Mass., to cost about $86,000. Arch., Arthur H. Bowditch, 85 Devonshire St.; contractor, Angus McDonald, 17 Otis St., Boston.

BUFFALO, N. Y.—Bids are asked until Nov. 23 for remodeling engine house No. 3 on Broadway, near Jefferson St., and for building an addition thereto. R. G. Parsons, Secy. Bd. of Pub. Wks.

SOUTH HADLEY, MASS.—A sum of $50,000 has recently become available towards the erection and equipment of a new dormitory building for Mount Holyoke College. Treas., A. L. Williamson, Northampton, Mass.

DANBURY, CONN.—Bids are asked until Nov. 26, according to reports, for the construction of a court house. Arch., Warren R. Briggs, 338 Main St., Bridgeport, Conn.

FARMINGTON, CONN.—Plans are being prepared, according to reports, for a 1½-story frame dwelling, 30 x 50 ft., for A. A. Pope, Cleveland, O., and Miss A. Pope, to cost about $50,000. Archs., McKim, Meade & White, 160 5th Ave., New York.

NEW BRITAIN, CONN.—The directors of the New Britain Institute have awarded the contract for building the proposed library, to B. H. Hibbard, of New Britain, at about $50,000. Archs., Davis & Brooks.

ALBANY, N. Y.—We are informed that plans are being prepared for a public bath to be erected on Broadway, near Orange St.; estimated cost, $30,000.

BROOKLYN, N. Y.—Bids are asked by the department of public charities, foot of East 26th St., New York, until Nov. 22, for the erection of one idiot pavilion, one nurses' home, two new wings, and materials and alterations to the central top story of the Kings County Hospital; work to be completed within 180 days.

BUFFALO, N. Y.—Bids were received by the commissioner of public works, Nov. 9, for erecting school buildings on Delaware Ave., near Bryant St., and at West and Delavan Aves., at $65,590 and $77,311 respectively.

NEW YORK, N. Y.—Bids are asked by the board of education, at 585 Broadway, until Nov 21, for supplying heating and ventilating apparatus and electric lighting plant for Public School 169, and for supplying furniture for Public School 166, Borough of Manhattan; also for supplying heating and ventilating apparatus for Public School 164, and for supplying furniture for Public School 167, Borough of Bronx; also for excavating, grading, concreting, etc., at Public School 94, Borough of Brooklyn; also for improving the sanitary condition of Public Schools 4, 17 and 18, Borough of Richmond.——Plans have been prepared, according to reports, for a 9-story theatre building, 100 x 175 ft., to be erected at 124th St. and 7th Ave., for George Blumenthal, Mgr. of Harlem Opera House, to cost about $450,000. Arch., Alfred Zucker, Decker Bldg.——Plans have been filed by Thos. McKeon, 338 East 66th St., for an 8-story brick and stone store and loft building, at 16 East 17th St., to cost $90,000. Arch., Wm. J. Dilthey, 1 Union Square; by John D. Karst, Jr., 258 West 38th St., for four 5-story brick flat buildings, at 438 to 444 West 29th St., to cost $70,000. Arch., Louis Korn, 37 Maiden Lane.

SYRACUSE, N.Y.—The Northcott Warming & Ventilating Co. has been awarded a contract for a heating apparatus for the Washington Irving school building, at $1,930.

TOMPKINSVILLE (S.I.), N. Y.—Bids are asked until Dec. 23 for metal work and erection of the West Bank light station, as stated in our advertising columns. Lieut.-Col. D. P. Heap, U. S. Engr., Tompkinsville.

ATLANTIC CITY, N. J.—Besides the new hotel building just completed for Clarence M. Busch, 606 Pacific Ave., at a cost of $35,000, reports state that extensive improvements will be made to the Hotel Rudolph, Chas. R. Myers, proprietor; and also to the Scarborough, of which Alfred Wyman is proprietor, and the Wiltshire Hotel, S. S. Phoebus, proprietor.

BRIDGETON, N. J.—The Cumberland county freeholders, Nov. 8, adopted plans and specifications for a new $60,000 county insane asylum to be erected on the almshouse farm.

BRADDOCK, PA.—George Hogg, of Braddock, has been awarded the contract for erecting the new 2d Ward school building, at $47,677.

CANONSBURG, PA.—A fire in this town Nov.14 destroyed a number of business buildings near West Pike St. and Jefferson Ave., causing a reported loss of $150,000.

PHILADELPHIA, PA.—Plans are being prepared, according to reports, for a 6-story office building, to be built at 10th and Market Sts., at a cost of about $70,000. Arch., E. L. Rice, Jr., Equitable Bldg., Wilmington, Del.——Plans have been filed for a 17-story business building, 60 x 145 ft., to be erected for the Real Estate Trust Co., at Broad and Chestnut Sts.

PITTSBURG, PA.—A permit has been granted for the erection of the new Sterrett school building, on Lang Ave., at a cost of about $100,000.

PARKESBURG, PA.—The citizens of this borough have voted to issue $20,000 in bonds towards the immediate erection of a new school building.

SAVANNAH, GA.—The following bids were received Nov. 10 for the construction of hospital wards, etc., for a general hospital for 1,000 beds in Savannah: Capt. J. W. McHaig, A. Q. M.: William Armitage, Savannah, $129,200, 90 days; Miles & Bradt, Atlanta, $93,000, 50 days; W. F. May & Co., Chattanooga, $77,934.33, 60 days; Nicholas Ittner, Atlanta, $83,323, 120 days; Woodward Lumber Co., Atlanta, $103,300, 100 days; George Moore & Co., Nashville, Tenn., $105,000, 90 days; L. W. Woodward, Augusta, Ga., $92,000, 90 days; Harris & Black, Savannah, $132,176.87; Stewart Contracting Co., Savannah, Ga., $94,305; W. A. Miller, Waycross, Ga., $88,528, Feb. 1; Samuel H. Walker, Washington, D. C., $113,000, 60 days; Reuben W. Darby, Washington, $99,000, 40 days; Anderson Construction Co., Savannah, Ga., $99,900, 90 days; George Girvan, Manassas, Va., $117,000. There were nine bids for the plumbing contract, the lowest of which was that of Henry D. Roette, Baltimore, Md., at $12,679.

BIRMINGHAM, ALA.—Plans have been accepted for the new hospital building to be erected at Fountain Heights for the Sisters of Charity, to cost about $250,000 when completed. At present but one wing will be built at a cost of $60,000. Archs., T. U. Walters & Co., Birmingham.

SHELBYVILLE, KY.—L. C. Millis, Mayor, informs us that plans and proposals will probably be asked early next year for the new court house now under consideration by a joint county and city committee; estimated cost, $50,000.

EATON, O.—The following bids were received, Nov. 5, for heating, plumbing, etc., in court house, Eaton, W. A. Edison, County Auditor: Sanders & Essmein, Columbus, O., $5,000; Barger Bros., Columbus, $4,925; Ware & Moodie, Dayton, $4,985; F. Desarmoux & Co., Springfield (accepted), $4,875.

PORT CLINTON, O.—The commissioners of Ottawa county have awarded the contract for the building of the new court house to Caldwell & Drake, of Columbus, Ind., at $45,571. Marblehead stone will be used. Other bidders were: H. Karg, Fostoria, O., $49,000; William Doersbach, Sandusky, O., $44,900; Geo. Feick, Sandusky, $50,000; Proepp Bros., Toledo, O., $53,374; M. Rabbit, Toledo, $61,000; Eb Burch, Port Clinton, $52,000; James Dacault, Columbus, O., $47,539.60.

DETROIT, MICH.—Robt. Y. Ogg, Secy., Bd. of Pub. Wks., informs us that Spitzley Bros. were the only bidders, on re-advertisement, for erecting the new G. A. R. memorial building, at $39,685, for Woolmith cut stone, and $39,000 for Ionia stone.

CHICAGO, ILL.—A permit has been granted to John Monk for erecting a 10-story store building, 30 x 90 ft., at 161 Market St., to cost about $60,000. Arch., H. B. Wheelock, 226 La Salle St.——It is reported that Charles Netcher, of the Boston Store Dry Goods Co., contemplates the erection of an addition to the present building on Madison St.——C. R. Cave, owner of the South Chicago department store, is also said to expect to erect the second half of his building at Indiana Ave. and 48th St., at a cost of $60,000.

SAN ANTONIO, TEX.—The large department store of J. W. Stewart was destroyed by fire Nov. 10; loss, $150,000; insurance, $40,000, according to reports.

SACRAMENTO, CAL.—Plans and specifications are asked by the board of education, until Dec. 6, for a new high-school building, to cost about $80,000, excluding the site and the equipment.

SALINAS, CAL.—A special election will be held Dec. 15 to vote upon the proposition of issuing $30,000 in bonds for a new high-school building.

NASSAU, NEW PROVIDENCE, WEST INDIES.—J. A. MacDonald, builder, Miami, Fla., is said to have charge of the construction of a new 4½-story brick hotel building, to be erected here for Henry M. Flagler, 26 Broadway, New York, at a cost of about $200,000. Ingle & Almirall, Consulting Archs., 874 Broadway, New York.

WATER-WORKS.

CHESTER, VT.—We are informed that the Chester Water Co. has let the contract for building works to the C. H. Egloe Co., Boston, Mass. The water will be supplied by gravity from a brook. The works will be completed by July 1, at a cost of $40,000. L. N. Farnum, Engr., 17 Central St., Boston; J. E. Pollard, Pres.

ST. JOHNSBURY, VT.—R. S. Cheney, Supt. Water-works, writes us that no improvements or extensions to works are contemplated, as reported in our issue of last week.

BAINBRIDGE, N. Y.—T. L. Randall is reported as making surveys for extending the mains of the Bainbridge Water Co.'s works for a distance of four miles, and also for a new reservoir.

BUFFALO, N. Y.—The board of public works has selected a site for the new pumping station on the park lands. The point chosen for the shaft is 200 ft. from the street, and for the building 100 ft. from Jersey St. The tunnel will be 5,800 ft. long, will run out to the Emerald Channel, and will cost about $300,000. Bids will be opened next spring and the work will take about two years. The two boards will decide upon the details of the building for the pumping plant, which is designed to be an ornament to the parks.

CHURCHVILLE, N. Y.—An election will be held Nov. 23 to vote on the question of issuing $5,500 in bonds for works. The water supply will be furnished by Sage & Potter.

DUNKIRK, N. Y.—R. L. Cary, Pres. Water Bd., writes us that the water board will undoubtedly soon purchase new pumping machinery. The capacity, cost, etc., have not yet been decided upon. No action has yet been taken toward letting the contract. C. J. Carney and Wm. Bookstaver are on the committee.

NEWBURGH, N. Y.—Jos. A. Sneed, Pres. Water Comrs., writes us that the city has a water supply from Washington Lake, but it is deemed inadequate by the engineers and the commissioners, who have recommended to the council to call an election to vote on the question of an additional water supply. The vote will not be taken before December. The estimated cost of the increase supply is $274,000. There will be required about 4½ miles of 20-in. cast iron conduit. The water will be furnished by gravity, with about 400 ft. head. Everett Garrison, Engr. Bd. Water Comrs.; John D. Van Buren, Consult. Engr.

ARKVILLE, N. Y.—H. Robinson, of Stamford, N. Y., and Abner Morse are reported as making surveys for works for this place.

UTICA, N. Y.—The West Canada Water Co. has been granted a franchise to lay water pipe through this city to furnish New Hartford, New York Mills, etc. Water will also be supplied to this city. Work will be begun at once, the contract for building the works having been awarded to the T. A. Gillespie Co., Pittsburg, Pa., and Havemeyer Bldg., New York. Geo. L. Record, Pres. West Canada Water Co. Newark, N. J.; W. S. Bacot, Engr., 1 Broadway, New York.

ALLENHURST, N. J.—Bids were received Nov. 14, for the purchase of $60,000 of 4% 30-year gold bonds for the purchase of the property of the Coast Water & Sewer Co., voted for Nov. 4. E. P. Benjamin, Mayor.; E. H. Ward, Jr., Clk.

HIGHTSTOWN, N. J.—The New York Filter Co., New York, has been awarded the contract at $2,500 for putting in a filter at the water-works, according to reports.

BENNETT, PA.—C. W. Dankmyer, Clk., writes us that this place voted Nov. 8 to issue bonds for additional machinery, to pump water from the works of Millvale Water Co.

CANONSBURG, PA.—J. P. McNary, it is stated, is interested in the proposed works for this place.

DOYLESTOWN, PA.—J. L. Kramer, Pres. Council, writes us that the council does not think it will require a great deal of work to get an increased water supply as proposed. Population, 3,500.——The following bids were received Nov. 7 for a cover to the reservoir at the cemetery: Frederick Tibbils, $2,780; King Bridge Co. $2,100, and North Penn Iron Co., $1,900.

EPHRATA, PA.—The question of either having the Ephrata Water Co. increase its supply or of building municipal works is being considered.

BRADDOCK, PA.—The council of North Braddock is considering the question of building works. Reports state as follows: The committee, on Nov. 8, submitted to the borough council a plan for works that makes a requisition for 4.08 miles of 8-in. pipe, 6.27 miles of 6-in. pipe, 1.87 miles of 4-in. pipe, 72 hydrants, 35 8-in. valves, 18 4-in. valves, 108 boxes, a stand-pipe, 60 × 50 ft., and pumping station property; the works to cost about $80,000. The cost of operation will be about 4 cts. a 1,000 gallons on a basis of 500,000 gallons daily. The yearly revenue, after supplying the fire department, is estimated at $24,000, giving consumers a rate of 15 cts. a 1,000 gallons.

PHILADELPHIA, PA.—Plans and specifications for the proposed reservoir on George's Hill, West Philadelphia, are reported as about completed. It will have a capacity for about 100,000,000 gallons. Estimated cost, $500,000. Bids will probably soon be asked by the director of public works.——Macey, Henderson & Co., Flood Bldg., have the contract for the additions to the Shawmont Pumping Station in Fairmount Park, for the city. A five-stack, 175 ft. high, built of brick and stone, will be included.

READING, PA.—This city voted, Nov. 8 against issuing $225,000 in bonds for a water filtration plant. The vote was 2,039 for and 4,579 against the proposition.

ROBESONIA, PA.—The Robesonia Water-Works Co. has been organized to build new works. Capital stock, $15,000. Adam P. Miller, C. Z. Zimmerman and Frank Bricker are on the committee to consider sources of a water supply.

WILLIAMSPORT, MD.—D. G. Adelsberger, 722 Pennsylvania Ave., Baltimore, Md., is preparing plans for works and a light plant. There will be required cast iron water pipe, a steel water tower, valves, hydrants, pumps, etc.

BALTIMORE, MD.—D. G. Adelsberger, 722 Pennsylvania Ave., is preparing plans for works for Embla and Tuxedo Parks, suburbs of this city. Pipe, valves, hydrants, deep well pumps, gasoline engines, etc., will be required.

CHESAPEAKE BEACH, MD.—Arrangements are being made for the construction of the proposed works and electric plant at the Beach for the Chesapeake Beach Ry. Co. The water supply will be secured from artesian wells. There will be a water tower, pumping station, etc. Geo. C. Morgan, Engr., 808 Royal Insurance Bldg., Chicago; Otto Mears, Pres., Washington, D. C.

HIGHPOINT, N. C.—J. Elwood Cox writes us that there is under discussion the question of building works in the spring or summer. Population (1890), about 2,180. W. G. Bradshaw, Mayor; J. J. Cox, Secy. and Treas.

CANTON, GA.—B. F. Perry, Clk. and Treas., writes us that it is proposed to ask the legislature to grant the town authority to vote on the question of issuing $10,000 in bonds for works.

MONTICELLO, ARK.—Walter G. Kirkpatrick, Jackson, Miss., is preparing plans for works for this place.

NASHVILLE, TENN.—Local papers state that bids are wanted at once by Geo. Bever, Supt. Water-Works, for furnishing about 340 tons of 6-in. and 60 tons of 8-in. cast-iron water pipe; 13 tons of special castings, 55 hydrants, four 8-in. and 40 6-in. gate valves, and ten tons of soft pig lead.

SOMERVILLE, TENN.—Bids are asked until Dec. 1 for constructing works and an electric plant to cost $16,000. Geo. C. Morgan, Des. Engr., Royal Insurance Bldg., Chicago, Ill.; E. R. Scruggs, Recdr.

GEORGETOWN, KY.—N. H. Sinclair, Mayor, writes us that the proposition to issue $12,000 in bonds for works did not carry at the election on Nov. 8.

MOUNT STERLING, KY.—Geo. W. Baird, Mayor, writes us that this place voted, Nov. 8, against issuing $80,000 in bonds for works.

CLEVELAND, O.—Bids are asked until Nov. 25 for furnishing and installing at the Division St. pumping station of the Cleveland water-works, a portable boiler, pulsometer pump, and carriages, complete. Geo. R. Warden, Dir. Pub. Works.

MARIETTA, O.—Press reports state that the contract for furnishing a 3,000,000-gallon pumping engine will be awarded to the Snider-Hughes Co., Cleveland, O., at $15,918.

BEREA, O.—This place voted, Nov. 8, to issue $30,000 in bonds for works.

McCONNELSVILLE, O.—Geo. Birch, Clk., writes us that bids will be asked about Jan. 1 for the purchase of $20,000 of water-works bonds, voted for in September. The bonds will be sold about Feb. 1.

NEW RICHMOND, O.—Plans and specifications for works and an electric plant are about completed by J. F. Wilmer, 705 Ellicott Square, Buffalo, N. Y. H. Buckley, Pres. Trustees, writes us that bids will probably be called for next week. Bids for the bonds have been opened, but they have not yet been placed. C. R. Day, Clk.

TROTWOOD, O.—C. O. Lucas & Co., Greenville, O., have been awarded the contract for installing the machinery for the proposed works for this place. J. B. Gingry, Greenville, has the contract for the trenching and setting of hydrants.

WELLSVILLE, O.—This place voted, Nov. 8, to issue $15,000 in bonds for extending the works. D. A. Davidson writes us that no steps have been taken toward securing plans and specifications.

UPPER ALTON, ILL.—The council has granted a 25-year franchise for works to the Alton Water-Works Co.

DUQUOIN, ILL.—H. A. Keith, Redfield Ave. and Stein St., Chicago, and J. H. Thompson, 170 Washington St., Chicago, are reported to have been granted a franchise for works. In February a contract for building the works was awarded to them. Population, 5,000.

SHEBOYGAN, WIS.—The City Water Co., it is stated, will put in a new pump of 8,000,000 gallons.

PERSIA, IA.—Press reports state that bids will be wanted about May 1 for building works to cost $3,000. C. B. McColm and J. Seddon may be addressed.

ALBERT LEA, MINN.—M. M. Luce, Comr., writes us that a new pump has been purchased from the Deane Steam Pump Co., Holyoke, Mass. It will be installed either by the city or by contract. The council proposes to sink a 12-in. artesian well, to be an auxiliary to the 8-in. well.

EAST GRAND FORKS, MINN.—Bids are asked until Dec. 1 for constructing works and an electric plant, according to reports. W. I. Gray & Co., Engrs., Sykes Bldg., Minneapolis, Minn.

PERHAM, MINN.—T. M. Maguire, Minneapolis, Minn., is reported to have been awarded the contract, at $7,588, for the proposed works, exceptine the tank and steel tower. Alex. Nelson, Wadena, Minn, has the contract for the power station.

NEBRASKA CITY, NEB.—The Missouri Pacific Ry. Co., it is reported, will put in works for its system in this city.

SIOUX FALLS, S. DAK.—L. M. Estabrook, City Audr., writes us that the proposition to issue $130,000 in bonds for the purchase of the works of the Sioux Falls Water Co., or for building municipal works, carried at the election Nov. 8.

STANBERRY, MO.—An election was held Nov. 15 to vote on the question of issuing $3,000 in bonds for a stand-pipe, according to reports.

WYNNE, ARK.—M. Jolly, Secy. Bd. of Improvements, informs us that the following bids were received Nov. 10 for constructing works and an electric plant:

G. Jaeger, Batesville, Ark. (accepted)	$15,490
Rees Brothers, Fayetteville, Ark.	15,685
C. H. Jenks, St. Louis, Mo.	15,750

GUTHRIE, OKLA.—The council and the water commissioners are considering a proposition from John H. Havighorst for an increased supply. Mayor Berkey may be addressed.

HILLYARD, WASH.—The Hillyard Town Site Co. will spend about $10,000 for improvements to the water-works, streets, etc., at this place, according to reports. F. Lewis Clark, Pres.; A. D. Jones, Agent.

KLAMATH FALLS, ORE.—The Corona Land & Water Co. has been incorporated with a capital stock of $100,000, by Sam'l C. Trazner, A. L. Leavitt and C. L. Parrish.

PASADENA, CAL.—The San Pasqual Land & Water Co. has been incorporated with a capital stock of $500,000, of which amount $5,000 has been subscribed. The purposes of the organization are to buy and sell land and water rights, maintain water-works, etc. The directors are: P. M. Green, H. H. Markham, G. D. Patten, A. R. Dodworth and Frank S. Daggett, all of Pasadena. We are informed that the company will ask for bids about Jan. 1. The plans and specifications are not yet prepared. The water will be secured from artesian wells. Estimated cost, $100,000.

THREE RIVERS, QUE.—Bids are asked until Dec. 1 for constructing a pier and a suction pipe into the River St. Maurice. L. T. Desaulniers, Secy. and Treas.

STAYNER, ONT.—This place will vote, Dec. 13, on the question of issuing $26,000 in bonds for the proposed works.

THESSALON, ONT.—The question of building works, it is stated, will be voted upon.

VAN KLEEK HILL, ONT.—The town clerk writes us that the council has abandoned for the present the idea of taking steps for building works.

SANTIAGO, CUBA.—Press reports state as follows: The main question now before Gen. Leonard Wood, Governor of the Military Department of Santiago, is that of a water supply. The rainy season is about over, and, usually, after a month or so of dry weather water has to be brought from the mountains and sold in the streets. Gen. Wood is anxious to avoid a repetition of such conditions, and has engaged the services of three engineers to report as to the best methods of supplying the city with water, whether with artesian wells or otherwise.

SEWERAGE.

BOSTON, MASS.—Local papers state that the following bids were received Nov. 14 for repairs on the pumping engines at Cow Pasture sewage pumping station, Dorchester. The items are (1) new valve gear, governor pumps, governor piping, gear guards, marking gears, jacket piping, and changes in galleries; (2) low pressure inlet cam, cam-shaft bearings clutches, clutch-lever latches and quadrants, cut-off tell-tales, crank indexes, valve-stem drip cups and valve chest drains; (3) pump-valve seats, pump valves, valve plates, valve guards, interchangeability, nuts for valve seats, pump valve patterns, packing spare valves, etc., records of pump valves and pump drain valves; (4) charge for each hour of working time of each fitter under section for scraping steam valves; (5) charge for each hour of working time for each helper in same section: I. T. Morris Co., Philadelphia, (1) $17,950, (2) $3,250, (3) $29,790, (4) 50 cts., (5) 25 cts.; Lockwood Mfg. Co., East Boston, (1) $8,300, (2) $240, (3) $21,785, (4) 60 cts., (5) 40 cts.; Atlantic Works, East Boston, (1) $14,970, (2) $2,500, (3) $25,561, (4) 60 cts., (5) 40 cts.; George F. Blake Mfg. Co., New York, (1) $6,400, from which will be deducted $450, provided it is not required to furnish any pumps with bases or attendant fitting of pump proper as covered by section 4 for governor pumps; (2) $1,600, (3) $30,000, (4) 80 cts., (5) 40 cts.; Bertelsen & Petersen, East Boston, (1) $15,178, (2) $945, (3) $23,844, (4) 50 cts., (5) 35 cts.; Builders' Iron Foundry, Providence, (1) $15,950, (2) $1,780, (3) $25,500, (4) $6, (5) $3.

WORCESTER, MASS.—Local papers state that the construction of the Water St. tunnel sewer will be begun as soon as the council passes the order. The committee has voted to recommend that $100,000 be appropriated for this work.

BROOKLYN, N. Y.—Daniel J. Creem and Edward J. Gorman have been awarded the contracts for building sewers in the East New York section, one in the Eastern Parkway, and the other in Butler St., at $20,200 and $21,700, respectively. The bids for this work were opened during the last administration.

BUFFALO, N. Y.—The city engineer is said to be considering plans for sewers for South Buffalo.

LIBERTY, N. Y.—The commissioners have adopted the plans of Wise & Watson, Passaic National Bank Bldg., Passaic, N. J., and will soon submit the question of the building of the sewers to the voters of Liberty. If the result of the election is favorable, the commissioners will at once proceed to get everything in shape for the work of construction as soon as spring opens.

NEWBURG, N. Y.—Bids are asked until Dec. 19 for constructing the First St. tunnel sewer, as described in our advertising columns. D. J. Coutant, Clk. Bd. Pub. Wks.

NEW YORK, N. Y.—Bids are asked by the department of public charities, foot of East 26th St., Manhattan, until Nov. 28, for furnishing and laying a cast-iron sewer pipe on Randalls Island, and by Jas. Kane, Comr. of Sewers, 265 Broadway, Manhattan, until Nov. 30, for constructing a temporary drain in Bronx Park.

SKANEATELES, N. Y.—F. M. Thomas, Civil Engr., writes us that the citizens seem to be in favor of constructing a system. In making up the annual budget in February the trustees will probably include an appropriation for surveys for a system, with recommendations that the work be done in the spring.

ROCHESTER, N. Y.—It is proposed to construct a 5-ft. brick sewer in Culver road, at a cost of about $35,000.

ALLENHURST, N. J.—Bids were received Nov. 14 for the purchase of $60,000 of 4% 30-year gold bonds for the purchase of the property of the Coast Water & Sewer Co., voted for Nov. 4. E. P. Benjamin, Mayor; E. H. Ward, Jr., Clk.

RED BANK, N. J.—Bids are asked until Nov. 29 for the construction of sewers and appurtenances, as stated in our advertising columns. A. C. Harrison, Clk. Comrs.; Hedenberg & Kinsey, Engrs., 108 Fulton St., New York.

ETNA, PA.—Bids are asked until 7 p. m., Nov. 18, for constructing a certain sewer. S. E. Hanna, Chn. Com.

RANKIN, PA.—Bids are asked until noon, Nov. 21, for constructing about 1,800 ft. of brick main sewer and 3,400 ft. of pipe sewers. Trimble & Miller, Engrs., 430 Fourth Ave., Pittsburg; J. S. Sheekey, Clk.

BALTIMORE, MD.—The council has voted to build a 4-ft. brick sewer in Harris Creek at a cost of $24,000.

HAGERSTOWN, MD.—E. M. Schindel, Mayor, writes us that the matter of a system is in the hands of the committee. No definite action will be taken for some months. S. M. Bloom, Chn. Com.; M. L. Byers, Cy. Clk.

NATIONAL SOLDIERS' HOME, VA.—Bids are asked until Nov. 25 for furnishing materials and constructing the underground steam, water and sewer connections with two wooden barracks in course of erection on the grounds of this Home; also, for furnishing and placing one steam pump for pumping salt water to said barracks. P. T. Woodfin, Governor of Home.

NORFOLK, VA.—Jas. L. Winston writes us that $150,000 in bonds for a system in Brambleton, and for improving the streets, voted Nov. 8, will be issued at an early date. W. L. Sterling, Secy. Local Bd. of Brambleton; W. F. Brooke, Cy. Engr.

MARIETTA, GA.—The question of issuing $20,000 in bonds for a system is being considered by the council. It will require state legislation before bonds can be issued. R. E. Lamboy, Cy. Clk.

WAYCROSS, GA.—Waring, Chapman & Farquhar, 874 Broadway, New York, have presented estimates for a system to cost about $37,262.

NEW ORLEANS, LA.—Councilman Dreyfous has introduced an ordinance asking for bids until March 27 for the purchase of a 50-year franchise for a system.

JACKSON, MISS.—Efforts are being made for the immediate construction of a system. Messrs. Milsaps Virden and John Hart may be addressed.

COSHOCTON, O.—Bids are asked until Nov. 19 for constructing about 4,000 ft. of 10 and 8-in. pipe sewer, 6 manholes, etc. F. F. Wagner, Clk.

EAST LIVERPOOL, O.—Arrangements are being made for constructing sewers in district No. 2, this winter; estimated cost, $16,000.

WELLSVILLE, O.—This place voted, Nov. 8, to issue $75,000 in bonds for a system.

MARION, IND.—It is proposed to build a portion of the South Marion storm sewer this winter, at a cost of about $21,000. The total length will be about 7,679 ft.

PONTIAC, MICH.—Bids are asked until Nov. 25 for constructing 3,180 ft. of 8 and 10-in. pipe sewers, as stated in our advertising columns. Wm. J. Fisher, Cy. Engr.

CHICAGO, ILL.—Nash & Dowdle, the contractors building the sewer on the north side, have received the contract for the intercepting sewer in Sheridan road, between Pratt and Bryan Aves., at about $30,000.

GREENVILLE, ILL.—The Chas. T. Bray Construction Co., Belleville, Ill., has been granted a twenty-year franchise for sewerage construction in this city.

JANESVILLE, WIS.—The council, according to report, is arranging for a system. Alderman Sennett may be addressed.

DENISON, TEX.—Plans and estimate of the cost of a system have been ordered by the council. It is reported that work will be begun soon. City Engineer McWillie and Mayor Lebrecht may be addressed.

BAKER CITY, ORE.—D. L. Mooman has submitted a proposition for a flume 2½ miles long for use as a sewer, to cost about $4,655.

LONG BEACH, CAL.—Thos. H. James, of Santa Monica, Cal., is to design a system for this place, for which it is proposed to vote bonds.

MONTREAL, QUE.—The contract for constructing the sewage disposal works and a ten years' lease of the St Denis Ward sewage disposal farm has been awarded to Engineer Janin, at $16,000.

PUEBLA, MEXICO.—The Puebla state legislature has passed a bill authorizing the city authorities to contract for the construction of a system to cost about $2,000,000.

GARBAGE DISPOSAL—STREET CLEANING

WOODMONT, CONN.—Bids are asked by the sanitary board until Nov. 21 for the collection and removal of the refuse and garbage of the village. C. M. Smith, Clk.

CAMDEN, N. J.—The Sanitary Street Sweeping Co. has been incorporated, to manufacture, purchase and acquire street cleaning and sweeping machines; capital stock, $100,000, with $1,000 paid in. The directors are Charles D. Nicolai, Lawrence S. Nicolai, John Fitzmorris and John H. Boucher, Washington, D. C., and James E. Hays, Camden.

RICHMOND, VA.—Thos. E. Neal, Atlanta, Ga., submitted a proposition to the health committee, Nov. 11, to construct and operate a Thackeray incinerator plant for 30 days, as an experiment. The committee was favorably impressed by the offer, and in view of the fact that about $1,200 will have to be expended on the crematory at the beginning of next year, the communication was referred to the board of health.

LOUISVILLE, KY.—The joint health committee of the council met Nov. 7 and decided that the installation of an incinerator for disposing of the garbage was necessary. Since the last meeting, Health Officer Allen has correspondd with a number of the health officials throughout the country, asking information as to the methods employed in their cities of disposing of the garbage. Committees will be appointed by the respective boards to visit the various cities where garbage is burned. The council is anxious to have the question settled within the next month, so that the new tax levy may be increased for the construction of the plant.

NEWPORT, KY.—A report on the feasibility, cost, etc., of erecting a plant to burn the garbage and other refuse of this city will be presented to the council this month by W. L. Glazier, Cy. Engr. The city has received correspondence from 11 concerns in response to advertisement in Engineering News, inviting correspondence concerning the disposal of garbage in a modern sanitary way.

CLEVELAND, O.—Health Officer Hess has completed specifications for collecting refuse other than garbage and for the construction of a disposal plant. These will be submitted to the citizens' garbage commission, and a contract will be awarded later.

FORT THOMAS, KY.—The following bids were received Nov. 2 for the construction of a garbage crematory. Capt. C. D. Palmer, Asst. Q. M., Chicago, Ill.: Joseph McDermott, Newport, Ky., $1,495; L. H. Wilson, Newport, Ky., $1,800; Dixon Garbage Crematory Co., Toledo, O. (own plans), $2,300 and $900; Henry A. Schriver, Newport, Ky., $1,777.

CHICAGO, ILL.—Bids are asked until Nov. 19 for the erection of a timber trestle snow dump on the lake front basin. L. E. McGann, Comr. Pub. Wks.

STREETS AND ROADS.

BRAINTREE, MASS.—H. L. White writes us that a contract for removing curb, screening and storing 2,500 cu. yards of trap rock for street work, is soon to be let. Address chairman of selectmen or White & Wetherbee, Engrs.

NEW HAVEN, CONN.—Bids are asked until Nov. 21 for laying concrete walks and cobble gutters on certain streets. C. W. Kelly, Cy. Engr.

CORTLAND, N. Y.—A petition will be presented to the board of village trustees for paving Groton Ave., between Main St. and Otter Creek, a distance of 2,315 ft.

HAMILTON, N. Y.—It is reported that Dewitt S. Hadcock, Stockbridge, N. Y., has had plans prepared for a state road between Hamilton and Oneida, 18 miles long and 52 ft. wide; estimated cost, $40,000.

PITTSBURG, PA.—The following bids have been received by the county commissioners for improving portions of three roads: Streets Run Road: J. H. McQuaide, $44,116; J. M. Mcspadden, $41,428; Keeling & Ridge, $32,716; Booth & Flinn (accepted), $31,919; Ott Bros., $32,198. Freeport road: Booth & Flinn, $44,315; Keeling & Ridge (accepted), $40,592; C. M. Driver, $45,336; Evan Jones, $46,395; J. C. McQuaide, $43,863; Ott Bros., $40,734. Crooked Run Road: John Dell & Dinius Bros., $39,134; Keeling & Ridge, $47,014; J. C. McQuaide, $45,766; Booth & Flinn (accepted), $38,759.

SCRANTON, PA.—Bids are asked until 7.30 p. m., Nov. 17, for repairing asphalt pavement for 10 years. M. T. Lavelle, Cy. Clk.

ROCKVILLE, MD.—Bids are asked until Nov. 23, for the purchase of $25,000 of 4% turnpike bonds. W. W. Welsh, Clk County Comrs.

LYNCHBURG, VA.—Bids are asked until Nov. 21 for furnishing and hauling about 5,000 cu. yds. of broken stone, and paving about 2,150 sq. yds. of Rivermont Ave. L. P. Rodes, Cy. Engr.

JACKSONVILLE, FLA.—Philip Prioleau, Cy. Engr., is preparing plans and estimates for about 20,350 sq. yds. of brick paving on Main St. He informs us that they will be submitted to the board of public works for approval, about Nov. 17.

OWINGSVILLE, KY.—It was voted Nov. 8 to issue $38,000 in bonds for county road improvements, according to reports.

DANVILLE, KY.—The county voted Nov. 8 to issue $40,000 of turnpike bonds, according to reports.

RICHMOND, KY.—Reports state that it was voted Nov. 8, to issue $70,000 of turnpike bonds.

MAYSVILLE, KY.—It is reported that an issue of $60,000 of bonds for county road work was authorized Nov. 8.

BOWLING GREEN, KY.—At the election, Nov. 8, the county commissioners voted to issue $140,000 of 4% turnpike bonds.

CARLISLE, KY.—The county voted, Nov. 8, to issue $40,000 of turnpike bonds.

VERSAILLES, KY.—An issue of $40,000 of turnpike bonds was authorized at the election, Nov. 8.

BRIDGEPORT, O.—This place voted, Nov. 8, to issue $75,000 for street improvements. J. A. Fawcett, Clk.

CLEVELAND, O.—An ordinance has been passed to improve portions of High and Melrose Aves. by grading, curbing, draining and brick paving. H. H. Burgess, Cy. Clk.—W. H. Searles and J. B. Davis, Engrs., have submitted a report to the county commissioners, on the proposed improvement of the Brecksville Road.

ATLANTA, GA.—Bids are asked until Nov. 21 for paving the roadway of the Mitchell St. viaduct, with asphalt, brick or wooden blocks and the sidewalks with hexagonal tiling, sheet cement or asphalt. R. M. Clayton, Cy. Engr.

DAYTON, O.—Bids are asked until Dec. 12 for furnishing the material and for paving about 7,631 sq. yds. with Buckeye block, etc., 5,630 lin. ft. of curbing and 165 ft. of circular curbing, on Sycamore, Council and Charter Sts. J. L. Baker, Pres. Bd. Cy. Affairs.

HYDE PARK, O.—Bids are asked until Nov. 23 for the purchase of $9,721 of 4½% street improvement bonds. Frank Lewis, Village Clk.

MIDDLETOWN, O.—Bids are asked until Nov. 18 for furnishing and constructing limestone curb and gutter on Main and 9th Sts. J. V. Bonnell, Cy. Clk.

TOLEDO, O.—A resolution has been passed to pave Woodruff Ave., from Ashland Ave. to Madison St., with asphalt, brick or granite. L. P. Harris, Cy. Clk.

WELLSTON, O.—Bids are asked until Nov. 28 for the purchase of $7,491 of 5% street improvement bonds. F. P. Wangler, Cy. Clk.

DECATUR, IND.—We are informed that the question of macadamizing two roads, about 17 miles, affecting the city of Decatur and Washington township, was favorably voted upon Nov. 8 by the county commissioners. The contract will soon be awarded. W. E. Fulk & Co., Engrs., Decatur.

WAUKEGAN, ILL.—City Engineer Bowen has been directed by the board of local improvements to prepare plans and estimates for the improvement of portions of 11 streets.

COUNCIL BLUFFS, IA.—Bids are asked until noon, Nov. 19, for about 27,525 sq. yds. of brick paving, and 3,757 lin. ft. of curbing, on portions of certain streets. N. C. Phillips, Cy. Clk.

FORT MADISON, IA.—J. Ross Robertson, Cy. Engr., informs us that a contract was let Nov. 10 to John Bullard, at $.25, for 2,500 sq. yds. of macadam, on the Burlington Road.

ST. PAUL, MINN.—We are informed that the matter of paving 10th St., mentioned in our last issue, has been laid over until next spring, on account of the lateness of the season. L. W. Rundlett, Cy. Engr.

KANSAS CITY, MO.—Bids are asked until Nov. 24 for furnishing the material and for constructing sidewalks of hexagon block, pressed brick, stone and plank; also for furnishing the material and grading on certain streets. Henry A. Wise, Cy. Engr.

SIOUX FALLS, S. DAK.—L. M. Estabrook, Cy. Audr., informs us that sidewalks are built by special assessment. An ordinance providing for the construction of cement walks for certain districts is now being considered. No contracts will be let at present as it is too late in the season.

SEATTLE, WASH.—F. N. Little, Supt. Sts. and Parks, writes us that the council is trying to get the citizens and tax-payers interested sufficiently to appoint a committee to secure the right of way for a boulevard system of several miles, along the water front of the bay, Lakes Union and Washington.

SAN FRANCISCO, CAL.—The City Street Improvement Co. has submitted the lowest bid, at $31,000, for paving Market St. with bitumen, between Taylor St. and Van Ness Ave.

HAMILTON, ONT.—A by-law will be submitted to a vote at the next municipal election, to raise $200,000 for road improvements.

MANUFACTURING PLANTS.

BROCKTON, MASS.—Plans are completed for the enlargement of the Cobb shoe factory to be ready next June. E. E. Taylor Co., Brockton.

LYNN, MASS.—A fire here Nov. 7 damaged the forge shop of the American Ordnance Co., which is in a portion of the General Electric Co.'s plant; loss, about $10,000.

NEWBURYPORT, MASS.—It is reported that the Fiberloid Co. will erect an addition to its main factory and enlarge the boiler house, and install two new boilers.

SOUTHINGTON, CONN.—R. W. Cowles, Plantsville, Conn., has been awarded the contract for erecting a brick addition, 30 × 60 ft., to the factory of the Peck, Stow & Wilcox Co.

ELMIRA, N. Y.—John N. Stearns & Co., silk manufacturers, of 220 East 43d St., New York, are said to contemplate the erection in this city of a factory building, to cost $25,000, and employ about 800 hands.

SCHUYLERVILLE, N. Y.—The Liberty Wall Paper Co. has let the contract for the foundations and cellar walls of its new mill, 400 × 100 ft. Surveys are being made for a branch from the Fitchburg R. R. to the company's mill.

WHITESTONE (L. I.), N. Y.—The contract for the erection of a 2-story fireproof instrument repair shop, 100 × 25 ft., for the government at this point, has been awarded; cost, $10,000.

GARWOOD, N. J.—The New Era Metal Co., according to reports, will build an addition to its plant.

BRADDOCK, PA.—It is reported that the Home Brewing Co., of this place, will build a brewery, having a capacity of 100,000 bbls. a year. P. J. Brennan, of Braddock, is interested.

FRANKLIN, PA.—The plant of the Franklin Mfg. Co., makers of asbestos materials, was destroyed by fire Nov. 7; loss, $40,000; insurance, $8,000.

PHILADELPHIA, PA.—Plans have been completed, according to reports for a 2-story brick and iron acid house, 50 × 200 ft., at Weccacoe Ave. and Delaware River, for the Pennsylvania Salt Works Co.

WILLIAMSPORT, PA.—The Lycoming Rubber Co. contemplates erecting a new building and installing new machinery in its plant; three large 72-in. tubular boilers have been ordered.

FORT PAYNE, ALA.—It is reported that E. N. Cullom, of Birmingham, purchaser of the Alabama Steel Works, will put the plant in operation soon, and that J. M. Caldwell, of Birmingham, will go East to purchase machinery for an additional rolling mill.

CLARKSVILLE, TENN.—Reports state that plans for a shirt factory, to cost $50,000, have been completed, and that contracts for erection will be awarded at once. B. F. McKeaye, Jr., is said to be interested.

BARBERTON, O.—Reports state that the Stirling Boiler Co., of Chicago, Ill., will enlarge its works at this place.

COLUMBUS, O.—A fire in this city Nov. 7, destroyed the warehouse and forge rooms, 250 × 45 ft., of the Columbus Skein & Iron Works; E. Stoneman, one of the owners, estimates the loss at $50,000; insurance, $7,000. It will probably be rebuilt at once.

STEUBENVILLE, O.—It is reported that the Riverside Iron & Steel Co. will erect a 500-ton Bessemer plant on its present site.

QUINCY, MICH.—The Michigan Portland Cement Co., according to reports, will erect a large plant at Quincy.

AVERY, ILL.—Kingman & Co., of Peoria, will remove the plant of the Wier Plow Co., at Monmouth, to this place. It is probable that buildings will be erected at once, according to reports.

JOLIET, ILL.—A fire in this city Nov. 10, destroyed the Great Western Tin Plate mills; loss, $150,000; insurance, $47,000.

JOLIET, ILL.—A fire in this city Nov. 10 destroyed the tin plate mills of the Great Western Co.; reported loss, $250,000; insurance, $47,500.

PEORIA, ILL.—The Illinois Sugar Refining Co., recently incorporated, is looking for a site in this city, for its beet sugar plant.—The Cordage Co. is preparing plans for a new 3-story brick building, 88 × 165 ft., probably not to be erected until spring.

MILWAUKEE, WIS.—The Abel & Bach Co., of this city, trunk and bag manufacturers, expects to erect a 7-story steel-frame building, 120 × 200 ft., protected by automatic sprinkler system, with a reserve water supply of 32,000 gals. in a tower, to cost $86,000, to be completed next August. Also a 2-story addition, 50 × 200 ft., to its present factory, and a new barn, 30 × 50 ft.

MINNEAPOLIS, MINN.—The plant of the Hennepin County Co-operative Barrel Co., 14th Ave. South and 6th St., was destroyed by fire Nov. 3; loss, $40,000; insurance, $20,400.

ATCHISON, KAN.—It is reported that F. J. and T. C. Thomas will erect a $25,000 artificial ice plant, capacity 20 tons daily, on the line of the Atchison, Topeka & Santa Fe Ry.

KANSAS CITY, MO.—Mr. John Kelley, of Leavenworth, Kan., according to reports, will build a barrel mill of 2,000 bbls. capacity a day, costing $40,000, and an elevator with storage capacity of 3,000,000 bushels, in this city.

ST. CHARLES, MO.—The plant of the Central Milling & Commission Co. was destroyed by fire Nov. 6; loss, $25,000; insurance, $11,000. J. H. Mertin, Pres., says that no definite plans for the future have been made.

ST. LOUIS, MO.—The Hamilton-Brown Shoe Co., according to reports, contemplates the erection of an additional factory to cost about $200,000.

BRANTFORD, ONT.—It is said that the Waterous Engine Works Co. contemplates the erection of an addition to its works.

TORONTO, ONT.—The T. Eaton Co. has been granted a permit for the erection of a 5-story factory building, to cost $21,000.

NANTES, FRANCE.—Reports state that capitalists here are contemplating the establishment of a large ice manufacturing plant. Edward Kerr, 3 Rue Gresset, Nantes, may be addressed.

DAGESTAN, RUSSIA.—It is reported that a cotton spinning, weaving and dye works is to be erected in Dagestan, near Petrofsk, by the Caspian Mfg. Co., with offices in St. Petersburg.

TIENTSIN, CHINA.—Press reports state that the M. A. Forbush & Son Machine Co., Philadelphia, Pa., has been awarded the contract for the construction of a woolen mill at Tientsin, the machinery to be operated by electric motors, supplied by the Westinghouse Co., of Pittsburg, Pa.; contract price, about $50,000.

MISCELLANEOUS CONTRACTS.

BOILERS.—Boston, Mass.—Bids are asked until Nov. 22 for furnishing five boilers at the navy yard. Edwin Stewart, Paymaster-Gen., Washington, D. C.

DREDGING.—Oakland, Cal.—The board of public works has awarded a contract to O. P. Johnson, at $65,500, for dredging Lake Merritt. The itemized bids were given in our last issue.

REPAIRING TRANSPORT.—Washington, D. C.—Reports state that the Bath Iron Works, Bath, Me., has submitted the lowest bid, at $94,500, for repairing and making alterations to the transport "Manitoba."

CHEMICAL ENGINE.—Jersey City, N. J.—Bids are asked until Nov. 22 for furnishing one horizontal Babcock chemical engine fitted with a rotary deluge nozzle. Chas. Esterbrook, Clk. Bd. Fire Comrs., 244 Bay St.

PARK WORK.—Toledo, O.—The Ohio centennial commission has engaged W. J. Sherman, The Nasby, for the surveying and levelling of Bayview Park for the centennial exposition of 1902 or 1903. The work of improving the park will commence at once, according to reports.

COAL STORAGE BUILDING.—Philadelphia, Pa.—A contract has been awarded by the United Gas Improvement to the Structural Iron Co., Baltimore, Md., at $20,000, for the erection of a steel building for the storage of coal.

TELEPHONE SYSTEM.—Summit, N. J.—A franchise has been granted to the New York & New Jersey Telephone Co. to lay and maintain a conduit system for telephone and telegraph purposes. Robt. J. Muldowney, Township Clk.

COALING STATION.—New London, Conn.—J. W. Hoffman & Co., Philadelphia, Pa., has been awarded a contract at $137,500, for the construction of coal storage buildings, wharves, conveyors, etc., at the navy yard. M. T. Endicott, Ch. Bureau Yards and Docks, Washington, D. C.

LEVEE WORK.—New Orleans, La.—Bids are asked by the board of state engineers until Nov. 22 for constructing the Shady Grove levee in Bossier parish, and the Bayou Pierre enlargement, each including about 50,000 cu. yds. of earthwork.

STEEL PIER.—Atlantic City, N. J.—An iron or steel pier, 130 ft. wide and 1,200 ft. long, will be constructed at States Ave.; estimated cost, about $150,000. Bids were asked Nov. 10 by G. A. Dentzel, Philadelphia, Pa., for the wooden superstructure. James A. Cathcart, Atlantic City, is also interested.

TILE.—Philo, Ill.—Bids are asked by the Embarrass River drainage district until Nov. 29 for furnishing and laying 2,700 ft. of 16-in. tile, 1,400 ft. of 15-in. tile, 1,400 ft. of 14-in. tile, 1,300 ft. of 12-in. tile, 870 ft. of 8-in. tile and 1,200 ft. of 6-in. tile. Address J. L. Ray, Champaign, Ill.

PARK WORK.—Philadelphia, Pa.—Bids are asked until Jan. 14 for furnishing plans and for the development of League Island Park, comprising about 300 acres. Prizes of $750 and $250 will be awarded for the two best designs. A. S. Eisenhower, Ch. Bureau Cy. Property, 130 City Hall, Philadelphia.

PARK GRADING.—Newark, N. J.—Bids are asked until Nov. 23 for about 200,000 cu. yds. of earth excavation and 100 cu. yds. of rock excavation, in the middle division of Branch Brook Park, surety $20,000, as described in our advertising columns. A. Church, Secy. Essex County Park Comm., 800 Broad St., Newark.

BOILERS, MACHINERY, ETC.—Detroit, Mich.—Bids are asked until Nov. 21 for furnishing the boilers and machinery for four steam fog signals, and until Nov. 28 for furnishing the boilers, machinery, etc., for four complete steam fog signals, as described in our advertising columns. Lieut.-Col. M. B. Adams, U. S. Engr., Detroit.

CONDUIT.—Dorchester, Mass.—The following bids have been received for constructing a brick conduit 10 ft. in diameter in Callender St., between Don and Lyons Sts., including 4,000 cu. yds. of rock excavation. Benj. W. Wells, Supt. Sts., Boston: J. P. O'Connell, $20,159; C. E. Trumbull & Co., $21,442; D. F. O'Connell, $20,134; M. Russe & Co., $25,311; Jones & Meehan, $25,613; T. H. & G. M. Bryne, Hyde Park, Mass., $21,290; R. J. Malone (accepted), $16,395; John C. Coleman & Son, $20,851; George W. Judd, $24,639; H. P. Nawn, $20,039; H. A. Hanscom & Co., $35,170.

CONTRACT PRICES.

RIVER WORK.—Sacramento, Cal.—Geo. M. Randle, Asst. Engr. Pub. Wks., informs us that the following bids were received Nov. 2 for cutoffs in the San Joaquin River and Stockton Channel:

Bidder.	Levee work, cut-off No. 3, 45,000 cu. yds. cts.	Dredging, cut-offs. No. 3, 55,000 cu. yds. cts.	No. 4, 40,000 cu. yds. cts.
J. D. McDougald, Stockton	9½	15½	15½
T. B. Loodal, Broderick, Cal.	9½	..	..
San Francisco (Cal.) Bridge Co.	10	13⅞	13⅞
John Hackett, Oakland	9½	12½	12½

PIPE SEWER.—Spring Lake, N. J.—We are informed that the following bids were received Nov. 1, for constructing pipe sewers and an ocean outlet; contract was awarded to P. H. Harrison & Sons, St. Paul Bldg., New York; H. C. Van Arsdale, Borough Clk.

Bids Received at Spring Lake, N. J., Nov. 1, 1898, for Constructing Pipe Sewers and an Ocean Outlet.

	Building cut-let basin, etc.	Building jetty, etc.	Section ocean outlet, 640 ft.	18-in. pipe, 810 ft.	15-in. pipe, 3,156 ft.	12-in. pipe, 50 ft.	8-in. pipe, 767 ft.	Junction manholes, 10 each.	Ord'nary manholes, 2 each.	Inspection holes, 4 each.	Ventilators, 12, each.	Total.
A. P. Hamblin, E. Orange, N. J.	$950	$1,300	$2,000	$[illegible]	$[illegible]	$[illegible]	$[illegible]	$5.00	$30.00	$[illegible]	$[illegible]	$[illegible]
P. H. Harrison & Sons, New York	900	1,350	1,900	.60	.55	.40	.26	25.00	22.00	5.00	3.00	6,941
Callery & Murphy, Jersey City, N. J.	1,000	1,275	2,560	1.10	1.00	.89	.50	22.00	20.00	8.00	2.00	9,626
Mack Paving Co., New York, N. Y.	1,297	1,147	2,470	.95	.85	.64	.57	47.00	40.00	8.00	11.00	9,549
E. R. Patterson, New York, N. Y.	1,000	1,400	1,600	1.00	.80	.60	.50	35.00	30.00	14.00	5.00	8,234
S. L. Bartholomew, Asbury Park, N.J.	919	1,094	1,220	.74	.65	.47	.39	35.00	30.00	6.00	6.00	6,712
J. Irving Hillpot, Bound Brook, N. J.	1,093	1,660	3,300	.79	.70	.60	.42	32.00	30.00	7.50	3.50	9,706
Chandless & Dickinson	1,847	1,738	3,462	1.20	1.00	1.00	.80	35.00	30.00	10.00	17.00	12,493
Geo. W. Rogers, New York, N. Y.	...	1,300	2,350	...	...	...	...	.....	.....	....	....	.....

SHEET ASPHALT PAVING.—Hamilton, O.—The following bids were received Oct. 24, 1898, for sheet asphalt paving in 2d St., from Central Ave. to Black St.; in North 2d St., from High to Black St., and in South 2d St., from High St. to Central Ave.; the quantities are the totals for the three streets, the bids for the different streets being the same; L. A. Dillon, Cy. Engr.:

Quantities.	David Fois Asphalt Paving Co.	Warren-Scharf Asp. Pav. Co.	Columbia Construction Co.
Limestone curb ....15,440 lin. ft.	$0.55	$0.65	$0.40
Limestone gutter ..19,100 " "	.46	.50	.40
Old curb redrsd, &c.11,000 " "	.15	.15	.04
Cem. gutr and curb.14,700 " "	.60	.60	.55
Cement curb ..... 830 " "	.40	.40	.20
Cement gutter ..... 4,600 " "	.30	.30	.25
Resetting basins .. 24 each...	10.00	3.00	5.00
Sheet asphalt .....46,000 sq. yds.	1.88[1]	1.77[2]	1.74[3]
Total limestone work	$52,069	$51,178	$47,552
Total cement work	49,245	46,508	45,298

[1]Burmudez Lake. [2]Trinidad Lake. [3]Trinidad Lake.

ARTESIAN WELL.—Jamestown, N. Dak.—It is stated that the Rust Well Machinery Co., Ithaca, N. Y., submitted the lowest bid, Nov. 1, 1898, for sinking an artesian well 1,500 ft., at $2.45 a ft. for a 16-in. well, or at $1.95 for a 4-in. well.

ASPHALT PAVING.—St. Joseph, Mo.—The following bids were received by the council Nov. 2, 1898, for asphalt paving in 7th St., from Olive to Robidoux St.: Assyrian Paving Co., $1,78 a sq. yd.; Hugh Murphy, Omaha, $1.75; C. R. Hunt Co., $1.75; Bermuda Asphalt Co., $153; J. B. Smith & Co., Chicago, Ill., $1.42.

WATER PIPE.—Spring Lake, N. J.—H. C. Van Arsdale, Borough Clk., writes us that the following bids were received Nov. 1 for laying water pipe, as advertised in Engineering News; contract was awarded to Wm. J. Smith.

Bids Received at Spring Lake, N. J., Nov. 1, 1898, for Laying Water Pipe.

Bidder.	Pipe 10 in., 610 ft.	8-in., 5,830 ft.	6-in., 4,307 ft.	4-in., 9,310 ft.	Gate valves, etc., each 10-in., 1.	8-in., 7.	6-in., 5.	4-in., 19.	*Fire hydrants, 36 each.	Setting Pipes, specs, 8-in., 16000 lbs.	ft.	Total.
Daniel C. McManus, New York	$0.78	$0.62	$0.47	$0.34	$26.00	$21.00	$14.50	$10.50	$29.50	$0.02	$1.45	$11,368
Wm. J. Smith, Spring Lake, N. J.	.64	.50	.38	.26	25.00	18.50	12.95	9.75	22.00	.02	.60	8,943
J. Irving Hillpot, Bound Brook, N. J.	.81	.63	.48	.32	25.00	18.75	11.05	9.35	22.50	.025	.60	11,193
Headley & Christie, Newark, N. J.	.78	.63	.47	.32	31.00	22.00	15.00	10.00	25.00	.025	1.00	11,082
S. L. Bartholomew, Asbury Park, N.J.	.67	.52	.39	.28	24.50	18.25	12.75	8.50	25.00	.02	1.00	9,504
P. H. Harrison & Sons, New York	.71	.55	.42	.29	25.00	18.50	12.50	10.00	23.00	.02	1.50	9,973
L. J. Richardson, Utica, N. Y.	.70	.57	.40	.27	21.00	17.00	11.00	8.25	23.50	.02	.25	9,549
S. B. Oviatt, Asbury Park, N. J.	.70	.545	.39	.30	24.00	20.00	15.00	10.00	24.00	.023	1.20	9,966
Callery & Murphy, Jersey City, N. J.	.90	.75	.61	.51	35.00	25.00	15.00	12.00	39.00	.025	4.00	15,334

*Setting. The 8-in. pipe includes discharge and distribution pipes.

DREDGING.—Port Royal, S. C.—The following bids were received by the bureau of yards and docks, Washington, D. C., Nov. 12, 1898, for dredging at the Port Royal Naval Station: Geo. E. Field, Port Royal, S. C., item (1), $1.80 a cu. yd.; (2) $1.60; P. Sanford Ross, 277 Washington St., Jersey City, N. J., (1), $1,45; (2), $1.10; The Alabama Dredging & Jetty Co., R. Moore, Agent, Mobile, Ala., (1), $1.80; (2), $1.50. Item (1) being price a cu. yd. for material dredged and deposited on station, leveled and graded, and (2) being for material dredged and not deposited on station. The contract was let to P. S. Ross for item No. 2. The appropriation for this work is $100,000. M. T. Endicott, Ch. of Bureau, Washington.

WATER PIPE.—Vallejo, Cal.—The trustees received the following bids Oct. 24, 1898, for furnishing 1,000 ft. of 8 or 10-in., 1,000 ft. of 1-in., and 1,000 ft. of ¾-in. cast or wrought-iron water pipe: John Hellermann, 1-in. pipe, 7⅝ cts. a ft.; ¾-in., 5½ cts.; Miller, Sloss & Scott, 1-in., 6 cts.; ¾-in., 4½ cts.; 3-in., 93 cts.; Crane Co., 10-in., 60 cts.; 8-in., 45 cts.; 1-in., 5 3/10 cts.;; ¾-in., 3¾ cts.; Christin Froelich, 8-in., 77 cts.; 1-in., 6½ cts.; ¾-in., 4 6/10 cts.

STREET IMPROVEMENT.—Los Angeles, Cal.—The following bids were received Oct. 25, 1898, for improving certain streets: De Long St., between Pico and 16th Sts.—A. B. Hogan, grading, 19 cts.; curb, 17½ cts. C. W. Shafer, grading, 24 cts.; curb, 15 cts. M. S. Cummings, grading, 27 cts.; curb, 17½ cts. A. G. Strain, grading, 22 cts.; curb, 14 cts. Tryon & Coverly, grading, 26 cts.; curb, 16 cts. 22d St., from Toberman to Union Ave.—Tryon & Coverly, grading, 30 cts.; curb, 29 cts.; sidewalk, 9 cts. E. W. Durrell, grading, 20 cts.; curb, 28 cts.; sidewalk, 8 cts. P. J. Richmon, grading, 23 cts.; curb, 27 cts.; sidewalk, 8 cts. C. W. Shafer, grading, 23 cts.; curb, 27 cts.; sidewalk, 8 cts. A. G. Strain, grading, 24 cts.; curb, 27 cts.; sidewalk, 8 cts.

PAVING, SEWERS, ETC.—Tampa, Fla.—The board of public works awarded the contract, Oct. 25, 1898, for vitrified brick paving to the Coaldale Paving Co., at $1.36 a sq. yd., according to reports.

ASPHALT PAVING.—Scranton, Pa.—We are informed that the Barber Asphalt Paving Co., New York, submitted the only bid, Nov. 3, for 400 sq. yds. of paving in Forest Court, as follows: Grading and paving, $2 a sq. yd.; for furnishing and setting 6 x 12-in. curb, 53 cts. a lin. ft.; for furnishing and setting circular curb, 98 cts. a lin. ft. Curb to be set in concrete. Joseph T. Phillips, Cy. Engr.

PAVING AND SIDEWALKS.—Kansas City, Mo.—The following contracts were let Oct. 25, 1898, for paving and sidewalks: A. R. Mense—Paving alley between Grand, McGee, 11th and 12th, brick, $1.59. Tim Brosnahan—Grading alley between Mercier, Holly, 23d and 24th, 21 cts. Wm. Trehey—Grading alley between Grove, Flora, Howard and 25th, 16 cts. W. H. White—Grading alley between Forest, Tracy, 13th and 14th, 27 cts. Mason Rowland—Curbing Harrison, 19th to 23d, 39.25 cts. Sidewalks—M Schoonmaker—East side, Brooklyn, 18th to alley south, brick, 8.9 cts.; Wyandotte, 17th to Southwest Boulevard, brick, 8 cts.; west side Broadway, Ninth to Hopkins residence, granitoid, 19 cts.; east side Brooklyn, Belt railway bridge to 20th, granitoid, 17 cts. J. J. Armstrong—West side Woodland, 12th to 13th, brick, 8.3 cts.; west side Harrison, 18th to 19th, brick, 8 cts. White & Redmon—East side Penn, 21st to Southwest Boulevard, brick, 8.4 cts. Missouri Sidewalk Co.—South side 30th, Michigan to Euclid, brick, 8.99 cts. Bandera Flagstone Co.—South side 10th, Virginia to alley, west of Tracy, natural stone, 18 cts.

BROKEN STONE.—Baltimore, Md.—The following bids were received Oct. 19, 1898, by the county commissioners for furnishing and delivering broken stone f. o. b. at stations on the line of the Baltimore & Lehigh R. R. in the 11th district: B. F. Pope, 5,000 perches at points no further than Hyde's, 98 cts. a perch; I. H. Peddicord & Son, 4,000 to 6,000 perches—three sizes, Nos. 1, 2, and 3—95 cts. a perch; R. W. Pearce, 60 cts. a perch, delivered on cars, county or buyer to pay freight; Geo. F. Narden, two sizes and top dressing, $1.13 a perch; M. W. Offutt, 5,000 perches, three sizes, Nos. 1, 2, and 3, run of crusher, $1 a perch.

LEVEE WORK.—Sacramento, Cal.—E. E. Leake, Comr. Pub. Wks, and T. B. Hall, a member of the Auditing Board to the Commissioner, have awarded to F. Lowery, of Sacramento, the contract for strengthening a section of the river bank near the old Chicory ranch, as follows: 600 sandbags, 20 cts. each; 550 stakes, 20 cts. each; 200 lbs. of wire, 5 cts. a lb.; 500 cu. yds. of brush, $2 a yd.; 1,700 cu. yds. of mattress foundation, 10 cts. a yr.; 2,200 yds. of repairs to levee, 15 cts. a cu. yd.; total $1,740.

CEMENT.—Seattle, Wash.—Capt. Harry Taylor, U. S. Engr., Burke Bldg., Seattle, Wash., received the following bids Oct. 13, 1898, for furnishing cement: Balfour, Guthrie & Co., Seattle, Wash., 5,500 bbls. (Condor brand), $3.10 a bbl., if taken on arrival, duty unpaid; 7,500 bbls. (Condor) at $3.50 if delivered in 2,500 to 5,000 bbl. lots, duty paid; 13,000 bbls. (Condor), $2.85 if taken on arrival, duty unpaid. The latter bid was recommended for acceptance. Taylor, Young & Co., Portland, Ore., 5,000 bbls. (Josson brand), $2.90 a bbl. if taken in 2,500-bbl. lots, duty unpaid; 5,000 bbls. (Josson) $3.22 if taken in 2,500 lots, duty paid.

RECONSTRUCTING BOTTOM OF SEWER.—St. Louis, Mo.—The following bids were received Nov. 10, 1898, for reconstructing the bottom of the Mill Creek sewer, in all about 926 ft.; the work will include the entire cost of timber and earth excavation, the construction, maintenance and removal of all flumes and dams, and the furnishing and depositing in place of all concrete necessary to form the invert, the plastering of the invert, and every other expense which may be necessary in doing the work. B. H. Colby, Sewer Comr.; all bidders of St. Louis: Robert Wycoff, $20 a lin. ft.; Fruin-Bambrick Construction Co., $19.20; McCully Stone Mason Co., $18.50; James Black Masonry Construction Co., $18.00; R. J. McDonald & Co., $17.90; Hill-O'Meara Construction Co., $15.15; Bambrick-Bates Construction Co., $14.67; Skrainka Construction Co., $13.90; H. P. Heman, $13.50; Patrick McIntyre, $12.90; H. Ruecking & Co., $11.20; Stiefel & Ruckert, $10.90; Heman Construction Co. (accepted), $9.45.

BRICK PAVING.—Hamilton, O.—The following bids were received Oct. 24, 1898, for vitrified brick paving in a number of streets; L. A. Dillon, Cy. Engr.: J. M. Quill, Roseville block, $1.35 a sq. yd.; Harris block, $1.40; Athens block, $1.45; Bolen block, $1.50; name of brick not given, $1.30; either cement, tar or asphalt filler. Aug. J. Henkel, Athens block, $1.30, cement filler; $1.31, tar and asphalt filler. These bids are for 24,800 sq. yds. in 2d St., 15,100 sq. yds. in North 2d St., and 9,700 sq. yds. in South 2d St. Bids for remainder of work is as follows with total amount of quantities for the three streets: Limestone curb, 15,340 lin. ft., J. M. Quill, 60 cts.; A. J. Henkel, 40 cts.; old curb redressed, etc., 900 lin. ft., Quill, 10 cts.; Henkel, 20 cts.; cement crub, 16,040 lin. ft., Quill, 50 cts.; Henkel, 30 cts.; adjusting basins, 24, Quill, $8 each; Henkel, $5.

BLOCK ASPHALT PAVING.—Hamilton, O.—L. A. Dillon, Cy. Engr., informs us that the following bids were received Oct. 24, 1898, for block asphalt paving in 2d St., North 2d St., and South 2d St.: A. J. Henkel, limestone gutter, 19,200 lin. ft., 40 cts.; J. M. Quill, 40 and 45 cts.; Henkel, cement combined curb and gutter, 14,000 lin. ft., 45 cts.; Quill, 70 and 60 cts.; Henkel, cement curb, 840 ft., 40 cts.; Quill, 40 and 45 cts.; Henkel, cement gutter, 4,600 lin. ft., 30 cts.; Quill, 40 cts.; Henkel, asphalt block paving, 46,600 sq. yds., $2.27 a sq. yd; Quill, $2.17, $2.18 and $2.19; Henkel, resetting basins, 24, $5 each; Quill, $4. Where not otherwise stated the quantities and bids for the other work are in most cases the same as those given for brick.

INDUSTRIAL NOTES.

THE GENERAL ELECTRIC CO., Schenectady, N. Y., has established a sales office in the Templeton Building, Salt Lake City, Utah, in charge of Mr. B. E. Chubbuck.

WM. B. POLLOCK & CO., Youngstown, O., have the contract to furnish the steel plate work for the new blast furnaces in course of erection by the Ohio Steel Co., Youngstown, O. The contract is said to amount to about $100,000.

MACEY, HENDERSON & CO., Heed Building, Philadelphia, have the contract, it is reported, for the additions to the Shawmont Pumping Station, Fairmount Park, in that city, including a flue stack of brick and stone, 175 ft. high.

THE RICHMOND LOCOMOTIVE & MACHINE WORKS, Richmond, Va., has an order from the Canadian Pacific Ry., it is stated, for 12 special compound consolidated locomotives, duplicates of 15 others, recently delivered to the same railway.

WM. A. CHAPMAN & CO., 49 Westminster St., Providence, R. I., have the contract to build the concrete dam and power house for the development of a water power on the Susquehanna River, at Wrightsville, Pa., for the Martic Water & Power Co., Baltimore, Md.

THE HENRY DU BOIS CO., New York, has been incorporated by Messrs. Abraham Du Bois, Chas. Du Bois, Henry N. Du Bois and Edwin W. Du Bois, with $50,000 capital, to carry on the business of building, dredging and excavating on land and water.

THE ROCHESTER ELECTRICAL MFG. CO., Rochester, N. Y., has secured contracts to equip the fire alarm and police telegraph systems of Brooklyn, N. Y., and Paterson, N. J., with the Miller patent cut-outs, for the protection of the alarm and telegraph boxes. There are 1,200 fire alarm boxes and 900 police telegraph boxes, it is said, in Brooklyn alone.

THE AMERICAN REDUCTION CO., Philadelphia, and the Consolidated American Reduction Co. and the General American Reduction Co., New York, have had application made against them for the appointment of a receiver on behalf of Peoples Bros. of the former city. The allied companies have been engaged in the garbage disposal business in Philadelphia and New York, but have failed to secure municipal contracts for the same.

THE ROBB ENGINEERING CO., Amherst, N. S., is reported to have an order for two 300-HP. tandem compound engines to be direct-connected to dynamos for an electric railway in Australia. The company has also recently shipped a 300-HP. engine to England: three 250-HP. engines to the Isle of Man; three 125-HP. engines to Spain, and a 125-HP. engine to Newfoundland.

THE CARMAN-THOMPSON CO., Lewiston, Me., is reported to have the following among other contracts: Springfield (Mass.) R. R., 3,000 HP. in boilers; Providence, R. I., railway station, three large engines and piping; St. John (N. B.), St. Ry., power house; Portchester (N. Y.) St. R.R., power house; B. Peck Co., Lewiston, Me., heating system.

THE F. C. AUSTIN MFG. CO., Harvey, Ill., is applying to its bending machines or bulldozers an attachment recently invented by an employe, consisting of an adjustable form or die, by the use of which 13 sets of separate forms for bending different shapes, weigh only 166 lbs., while if applied to the machine in the old way, their weight would be many thousand pounds.

THE PITTSBURG BRIDGE CO., Pittsburg, Pa., through its New England agents, Collins & Norton, 33 Lyman St., Springfield, Mass., has received a contract from the Burgess Sulphite Paper Co., Berlin, N. H., to furnish a steel coal bunker with chutes to automatically feed its boilers, according to plans furnished by Mr. H. S. Ferguson, engineer, of Lewiston, Me. The company has also received contracts from the towns of Easton, Conn.; Williamsburgh, Mass., and Buckland, Mass., to build highway bridges.

NEW COMPANIES.—Pasteurized Water Co., St. Louis, Mo.; $3,000, with all paid in; Claude P. Crandall, Peter A. Connolly and J. M. Meyers.

Thackeray Incinerating Co., First National Bank Bldg., Jersey City, N. J.; $100,000; commencing with $1,000; to collect and incinerate ashes, garbage, etc.; Chas. B. Thurston, Jersey City; F. W. Montgomery, 52 Broadway, New York; Lewis Perrine, Trenton, N. J.

Insulated Wire Co., 60 Grand St., Jersey City, N. J.; $500,000, commencing with $1,000; to sell insulated wire and other goods; Samuel B. Lawrence, 13 Astor Place, and John B. Summerfield, 62 Wall St., New York; Burnham C. Stickney, Elizabeth, N. J.

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